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George B. Emerson.

HIS LIFE AND TIMES.

By R. C. WATERSTON.

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ΑΚΡΟΓΩΝΙ
ΟΥ ΧΡΙΣΤΟΥ.

With the Writer's

best regards.

BOSTON, 71 CHESTER SQUARE,

1884.

Geo. B. Emerson

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CAMBRIDGE:
JOHN C. CLAY AND SON
Printing House.
1884.

MEMOIR

OF

GEORGE BARRELL EMERSON, LL.D.

BY

ROBERT C. WATERSTON.

PRESENTED AT THE MEETING

OF

THE MASSACHUSETTS HISTORICAL SOCIETY,

MAY 10, 1883.

With a Supplement.

CAMBRIDGE:
JOHN WILSON AND SON.
University Press.
1884.

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MEMOIR.

In the town of Wells, Maine (then a part of Massachusetts), Sept. 12, 1797, George B. Emerson was born; and in March, 1881, at the house of his son-in-law, Hon. John Lowell, at Chestnut Hill, Brookline, he died, at the advanced age of eighty-four. His father was an able physician, a graduate of Harvard, a man of uncommon ability, with scholarly tastes and acquirements. Beloved and respected, he not only had a wide professional practice, but he made the schools a special object of his care. In the choice and appointment of teachers he was consulted, and as a visitor of the district schools his face was familiar, while his counsel and encouragement were always welcome. He had the right word both for parents and pupils, and exerted a beneficent influence wherever he went. Mr. Emerson's grandfather was a clergyman in Hollis, New Hampshire, and he not only was a very acceptable preacher, but he was widely known through all the county of Hillsborough for the pre-eminent skill with which he fitted young men for college. Thus the rare gift of teaching seemed to have been transmitted from generation to generation. As an inherited quality it had come down from father to son, not evidently wearing itself out, but gaining, with time, fresh impulse and inspiration.

Mr. Emerson's boyhood had nothing in it of special excitement. He was contented and happy with the simplest

method of life. Quiet in his manners, he was at the same time deeply in earnest. He had the most beautiful balance of character. There never appeared to be with him any great effort in acquiring knowledge, and when acquired it seemed to form a natural part of himself and had no tendency to be forgotten.

Let us look at the school-room. The building was such as is generally used for a common country school. It pretended to nothing more. It had the advantage of the watchful care of his father, Dr. Samuel Emerson, who, if the windows were broken or clapboards torn away, would at once send and have them repaired, so that there was not the disgrace of unreasonable dilapidation. But in justice it must be said that the teaching and discipline within the school always held the place of supreme importance. Only in the winter months did George attend school. In the summer he worked upon his father's farm and in the garden. At first thought, this may appear to have been a serious privation. Perhaps to many young people it would have proved so; but George always accounted this arrangement a piece of great good fortune. It gave him that out-of-door life, the benefit of which he felt through all his after years.

He worked with constant diligence, — sowing the early seed, watching each stage of growth, and gathering the autumnal harvest. Work on the farm he liked, and never grew weary of it. Every implement used he became thoroughly acquainted with. His own conviction was, that active life under the open sky tended to quicken his powers of observation, and was the best possible experience for him to have gone through. The most fragile plant he studied with unwearied care, and not a tree of the forest escaped his notice. The oak, the beech, the maple, the pine, the spruce, the hemlock, all won his attention, and revealed to him some secret law of their being.

Preparatory to his presenting himself at Cambridge, he attended for a time the Dummer Academy at Byfield, where he devoted himself to Latin and Greek. Any additional preparation for college was made at home, under the care of

his father. In 1813 he entered Harvard, and commenced his college life. Among his classmates were George Bancroft, Caleb Cushing, S. J. May, S. E. Sewall, and Stephen Salisbury. At that time President Kirkland was at the head of the college, Edward Everett was tutor in Latin, Professor Farrar was head of the mathematical department, while Dr. Hedge, Dr. Henry Ware, and George Ticknor held responsible positions. Such men could not but give life to the whole university.

Two letters have been received from those who were prominent in his class, — one from the Hon. Stephen Salisbury, and the other from George Bancroft, the historian. Mr. Salisbury writes: —

"My own rooms at Cambridge were at a distance from the college, which prevented that frequent intercourse which we might otherwise have enjoyed.

"We were therefore at that time not intimate, but when we did meet, it was always pleasantly. Our mature friendship sprang up in the last quarter of his life, rebuking the common notion that the happiness of love is the privilege of the young. . . . I can remember, but I cannot describe, the pleasure I had in Mr. Emerson's society and in his correspondence. That the enjoyment was mutual is proved, not only by his cordial welcome, but more tenderly and unequivocally by the neatly kept file of my occasional and not frequent letters which his daughter sent me after his decease.

"Such personal reminiscences as you ask will not be desired. You know, and can learn, all the particulars of his life. You appreciate and love his genial and wholesome character, and you will give us a memoir in which the old and the young will find pleasure and instruction."

Mr. Bancroft says: —

No. 1623 H Street, Washington, D. C.
18th May, 1882.

My dear Sir, — George B. Emerson, of my class in Harvard, was so industrious, and so exact in the discharge of all his duties, that there is no story to tell about him. He was very sweet and amiable; always cheerful, and very industrious; so regular that he was distinguished from others of his family name as *Pater* Emerson. I remember that

at one time he gave great attention to mathematics, and at all times to the study of Greek; having done as much or more than any one of us, in reading not only what was required, but a good deal more in the historians, especially Herodotus. I remember nothing of him that was not pure and ingenuous. He was one of our best scholars, and so far as I know never had the slightest jar with any one member of the class in the whole period of our course. I have tasked my memory for incidents, but were I to write a much longer letter, I should only have to repeat what I have already said, under different forms.

Yours truly,

GEO. BANCROFT.

To the Rev. R. C. WATERSTON, Boston.

These letters from his old classmates are proof of the respect and affection in which he was held. Indeed, it may well be said that the affectionate respect extended towards him was universal. It was seen throughout the whole college life. The president, professors, and students all united in this feeling, and it evidently continued to the end of his career without abatement. That which moulded him into such a noble manhood, giving to him maturity of judgment, imparting an elevated tone to every thought, was not the college text-books, whether Latin or Greek; it was the spirit which animated the whole body both of professors and students. Recall, for a moment, Kirkland and Bowditch, Ticknor and Norton, Hedge and Ware, Frisbie and Farrar, Cushing and Everett, Salisbury and Bancroft. Can any one think of such a company of men, and not feel their quickening power? Stimulated by companionship like this, the only real trouble was that the mind found little opportunity for rest. Mr. Emerson attempted to make four hours' sleep balance twenty hours given to work. As the result of this overdoing and wrong-doing, first the eyes gave out, and he became nearly blind; then the whole physical system broke down, and he was forced to go home and put himself under his father's professional care. He was reading Xenophon and Herodotus, Hesiod and Pliny and Cicero; and yet the time came when the over-taxed eyes were obliged to cease working. Having read all Homer except the last book of the Odyssey, worn out by

over-exertion, he sank midway. He knew then, full well, that he had been unfaithful to that sound sense which generally governed his actions. "My only consolation," he writes, "in regard to this misfortune, was that it gave me time to mature my acquaintance with my college friends. The most important of the many advantages of a college education is the opportunity of becoming well acquainted with persons of one's own age, and of forming intimacies with the best and most congenial."

While at Cambridge, he was appointed Tutor in Mathematics and Natural Philosophy. Professor Farrar held, at that time, the chief position in this department. "His lectures," writes Mr. Emerson, "on Natural Philosophy and Astronomy I have never known surpassed or equalled."

During the college vacations, Mr. Emerson taught school, in accordance with the general custom. In the Sophomore year he was not well enough to teach. In the Junior year he took a school situated near the saw-mills at Saco, where he was called to govern as rude and boisterous a set of young people as could well be found. He speaks of a flame which one day burst from the windows of the old school-house, and in half an hour there was nothing left but a handful of ashes. In the Senior year he kept a school for ten or twelve weeks at Bolton, where he found pupils wholly to his taste, who made excellent progress and were worthy of all commendation.

Such was his early experience in school-teaching. He had just graduated from Harvard when he received a letter from President Kirkland, offering him the position of master in an excellent private school recently established in Lancaster, Massachusetts, of which Jared Sparks had been the first teacher. The offer was accepted; and after what he had gone through in those district schools, scattered over the country, which, during the winter vacations, had been under his care, it was a new aspect of life to find himself in the beautiful village of Lancaster, and to enter upon a school whose arrangements were well ordered. The academy had been established through the generous efforts of Richard J. Cleveland and

the friends who united with him. At that time the number of pupils was limited to twenty-five, and the salary was five hundred dollars a year. He became so popular a teacher, and had so remarkable a gift in the management of boys, that applications became numerous, and the attendance increased to forty-two members. Here he continued for two years; but at length, overtaxed by constant exertion, his health grew feeble, and he considered it wisest to accept an invitation he had received to become tutor in the mathematical department of Harvard College.

His next experience as an instructor was as head master of the English Classical School, or, as it is now called, the English High School. The establishment of such a school had long been felt as a necessity. Judge Shaw and others associated with him resolved upon a plan by which a school should be founded, combining many advantages and privileges, which would be the crowning achievement of our whole public school system. In this work they had the approbation and assistance of Josiah Quincy and other prominent men, who determined to leave nothing undone to effect this purpose.

The school, with its past history of fifty years, may well be left to speak for itself. The whole community bears testimony to its worth. The design of its founders has been most successfully carried out. Mr. Emerson, the first teacher, imparted the right impulse. He appealed wisely and successfully to high motives. He addressed the most generous sentiments. He thought, at every step, as much of character as of intellect. "Strive not," he said to his pupils, "to surpass each other, — strive rather to surpass yourselves." From that day the work has been carried onward. Mr. Emerson left his impress upon the school. For two years he here taught, when he was urged with reiterated importunity to open a private school in the city for young ladies; and in April, 1823, this school, with thirty-two pupils, was duly opened, — a number which never grew less. The school was acknowledged by all to be unusually attractive. It had in it nothing superficial. It rested neither upon formalism nor

routine. Its aim was thought and discipline; while, in imparting knowledge, it sought to lay also the foundations of a character which would result in a worthy life here and a blessed immortality hereafter. In his efforts as a teacher he aimed, under all circumstances, to develop that which was noblest, truest, and best.

But it was not simply as a teacher, or in the school-room, that Mr. Emerson exerted his power. Wherever a company of intelligent men were desirous to disseminate truth, he was ready to bear his part, whether they moved together as a body, or acted as individuals. Difficulties never intimidated him. Many of the ablest societies in our community owe their usefulness, if not even their existence, to him. In the works of nature he everywhere beheld the proofs of a Supreme Intelligence, and was grateful if he could in any degree be to others the interpreter of the divine thought. He felt that the All-creative Mind was forever diffusing light, and that the finite mind, moved by a kindred spirit, may, according to its ability, unite in the same work.

One of the societies he was instrumental in forming was the Boston Mechanics' Institution, the object of which was mutual instruction in the sciences, as connected with the mechanic arts. This was in 1827. Dr. Bowditch was its first President. Judge Story was one of the early lecturers. Daniel Webster delivered an introductory address, after which George B. Emerson followed with a course of six lectures. Webster impressively says: —

> "God seems to have proposed his material universe as a standing, perpetual study to his intelligent creatures; where, ever learning, they can yet never learn all; and if that material universe shall last till man shall have discovered all that is now unknown, but which, by the progressive improvement of his faculties, he is capable of knowing, it will remain through a duration beyond human measurement, and beyond human comprehension."

The lectures that followed were an able exposition of the same great thought.

Through the efforts of Mr. Emerson, in 1830, an association of teachers and friends of education was formed, to take into consideration the condition of the schools, and to consult upon the best means adapted to promote their improvement. This became known as the American Institute of Instruction. It was voted that a memorial should be prepared by him and placed in the hands of the Governor, with the request that it should be brought before the Legislature. In compliance with this vote an elaborate paper was prepared, so clear in its statements, so convincing in its appeals, so strong in its arguments, that both the Senate and the House of Representatives put aside for the time all other business, and determined to go thoroughly into the subject. To make this work more effectual, a Board of Education was formed, and the President of the Senate, Horace Mann, who was acknowledged to be the ablest member in either branch of the Legislature, resigned his position in the Senate, and was unanimously chosen Secretary of the Board, that he might devote his whole attention to the educational interests of the State. One of the results was the establishment of normal schools, in which Mr. Emerson felt a deep interest, always being present when he could render service, if other duties rendered it possible. These schools have now become intimately associated with Lexington, Newton, and Bridgewater, and an efficient body of teachers has received therein such a thorough education as has fitted them in the best possible manner for their important work.

It is interesting to observe how the threads in the web of life are, from time to time, taken up. Mr. Emerson's old friend, Edward Everett, who at college was tutor in Latin, and with whom he enjoyed personal friendship; now, as Governor of the Commonwealth, received his memorial, entering heartily into his plans, considering how they should best be presented to the Legislature, and how they could be made productive of the most desirable results.

About three years after leaving Cambridge, Mr. Emerson took a pedestrian journey to the White Mountains in company with several of his old college companions. His descriptions

of this excursion are graphic. He climbed to the topmost summit of the mountains, where, as yet, no place of shelter had been erected, and where, as he writes, "all was savage and wild and desolate, as it was left by the hand of its Creator."

In 1874 he gave an address before the Society of Natural History, on Louis Agassiz, which was a worthy tribute to that remarkable man, whom he had known intimately for twenty-seven years, and for whom he cherished a strong affection. The day following, he was requested by Mr. Bouvé, the President of the Society, to furnish a copy of the remarks for the press. Fearing that what he had said was not worthy the subject, and that he had not done justice to his distinguished friend, he begged to be excused from printing his remarks. In the following letter he frankly expressed his views, showing the modest estimate with which he looked upon his own work.

No. 3 Pemberton Square, Jan. 7, 1874.

Rev. R. C. Waterston.

My dear Friend, — I listened with great interest and satisfaction to every thing that was said last evening by our President, Mr. Bouvé, and especially by you, — to all except what was said by myself. *That* seemed very poor. Now, will you not divest yourself of the kind partiality which I know you have always felt towards me, so far as to say frankly whether what I read would not better be forgotten than printed?

Yours truly,

George B. Emerson.

Why should every poor thing which is honestly said, be printed?

Speaking of Agassiz, he says: —

"I found him the wisest, the most thoroughly well informed and communicative, the most warm-hearted, and the most modest man of science with whom, personally or by his works, I had ever become acquainted. The strong impression he made on me was made on almost all who ever listened to or even met him. It is not surprising that the news of the death of Agassiz caused a throb of anguish in

millions of hearts. Such a death is a loss to mankind. We shall see his benignant face and hear his winning voice no more; but we have before us his example and his works. Let us dwell, for a few moments, on some features in his life and character as an inspiration and a guide. What a change has taken place in the whole civilized world, and especially in this country, in men's estimation of the value and interest of natural history and the great work of teaching! To whom is that change more due than to Agassiz?

"He was endowed by nature with extraordinary gifts. His fascinating eye, his genial smile, his kindliness and ready sympathy, his generous earnestness, his simplicity and absence of pretension, his transparent sincerity, — these account for his natural eloquence and persuasiveness of speech, his influence as a man, and his attraction and power as a teacher.

"Agassiz's universality of study and thought suggests a precious lesson. It is never safe to give one's self entirely to one study or to one course of thought. The full power of the mind cannot be so developed. Nature is infinite; and a small part of one kingdom cannot be understood, however carefully studied, without some knowledge of the rest. Neither must a man allow himself to be a mere naturalist. Every man ought to seek to form for himself, for his own happiness and enjoyment, the highest character for intelligence, and for just and generous feeling, of which he is capable. He is not a mere student of a department of nature. He is a man; he must make himself a wise, generous, and well-informed man, able to sympathize with all that is most beautiful in nature and art, and best in society. It would be a poor, dull world if all men of talent were to educate themselves to be mere artisans, mere politicians, or mere naturalists.

"Agassiz took a large, comprehensive view of the whole field of natural history. His thorough education and intimate acquaintance with the works of the highest men in several walks made it possible for him to do it, and he then fixed on certain departments, and for the time he gave himself entirely to one."

What Mr. Emerson says of Agassiz as a teacher is equally true of himself.

"His example has been inestimable: showing the importance of the best and largest possible preparation; teaching by things really existing and not by books; opening the eye to the richness and beauty of nature; showing that there is no spot, from the barren sea-beach to the

top of the mountain, which does not present objects attractive to the youngest beginner, and worthy of and rewarding the careful consideration of the highest intellect."

At different periods Mr. Emerson gave lectures upon topics connected with education. These were published and widely circulated. He discoursed in 1831, before the American Institute, upon Female Education; and in 1842 he took for his subject Moral Education. These addresses are full of profound thought and the most elevated sentiment. In their style they are transparent as crystal; and to this day they can hardly be said to have been outgrown in the many changes of over half a century. In 1831 he published, in company with the Hon. William Sullivan, a volume entitled "The Political Class-Book," giving a statement of the origin, nature, and use of political power. For this Mr. Emerson prepared a valuable paper upon Studies for Practical Men. In 1869, at the request of the Massachusetts Historical Society, he gave a lecture on Education in Massachusetts, its Legislation and History, — full of important suggestion and valuable facts. In 1878 he republished a series of papers, which had been first printed in the "Journal of Education," entitled "Reminiscences of an Old Teacher." These gave, in an interesting manner, many facts connected with his life.

In 1830 a number of gentlemen interested in scientific pursuits formed the Natural History Society. This has since become one of the most useful and popular institutions in our community. The early meetings were held at the office of Dr. Walter Channing, Theophilus Parsons acting as Secretary. Dr. Benjamin D. Greene was the first President, while Dr. Hayward, Dr. Ware, Dr. Greenwood, Dr. Jackson, and Dr. Augustus A. Gould were among the efficient members. In 1837 Mr. George B. Emerson was elected President, which office he held for six years. While the Society was under his charge, it was concluded that a botanical and zoölogical survey should be made of the whole State, to supplement the geological survey by Professor Hitchcock, which had been

authorized by the Legislature the year previous. The shells, insects, fishes, reptiles, and birds, together with the plants and trees of the Commonwealth, were to be fully investigated. Edward Everett, the Governor at that time, appointed Mr. Emerson Chairman of the Commission, making him responsible for the various departments. Among the gentlemen to whom the different subjects were referred were Dr. Harris, Dr. Augustus Gould, Dr. Storer, Rev. W. B. O. Peabody, of Springfield, and Professor Chester Dewey, of the Berkshire Medical Institute, — all able men and in every way competent for the important work; while their elaborate reports were not only considered valuable at the time when they were made, but are held to this day as authority upon the subjects of which they treat.

These surveys, made through the suggestion of the Natural History Society, and under the auspices of the Legislature, were of practical value in promoting the material interests of the State, and they gave a fresh impulse through the community to the study of natural science. The changes which have taken place in the scientific world since the formation of the Natural History Society have been very remarkable. Tastes which were confined to a few, now extensively prevail, and the various fields open for investigation have been both widened and enriched by the knowledge which has been acquired. Geology, almost within the memory of living persons, could hardly be called a science, — now it rivals astronomy in the grandeur of its facts; while astronomy, opening into infinitude, sees all space kindling with innumerable stars, and even the dim-floating nebula, which to the unaided eye appears but a luminous mist, resolves itself into planets and satellites and revolving systems of worlds. Chemistry has also made extraordinary progress, and laid society everywhere under obligation for what it has achieved; while botany, that fascinating study, which even now numbers the species of plants by hundreds of thousands, is constantly enlarging its boundaries, exciting the mind to fresh wonder by the wayside and in the forest, along the borders of brooks and rivers, and on the

mountain-tops where the delicate alpine plants delight to find a home.

Mr. Emerson, with his broad sympathy, could not pass by any of the sciences with indifference. His heart was large enough to embrace them all. They each had their peculiar interests. To his mind the kingdoms of nature blended the one with the other; and the more largely his knowledge was extended, the greater was the satisfaction gained. Thus, as he watched at night the brilliant constellations in the over-arching sky, he recalled in thought his astronomical studies at Cambridge, and declared that nothing gave him so much real pleasure; and that he never looked up into the heavens without experiencing a joy which no other object afforded. Still, life is too short, and the faculties of man too limited, to enable any one to grasp the whole domain of nature or to master completely the entire realm of knowledge. Circumstances have their inevitable influence, and as a general rule some one department of study will gain a preference. Hence, from various causes, botanical researches occupied much of Mr. Emerson's time and thought. The trees, shrubs, plants, and flowers of New England held a prominent place in his mind. At one period of his life the professorship of Natural History and the direction of the Botanical Garden at Cambridge, in connection with Harvard University, were offered to him, showing how fully his tastes were understood and his acquirements recognized.

Though he declined this professorship, the love of nature tenaciously clung to him. His thoughts went back to the old homestead, — to the time when he worked in his father's garden and on the farm. Trees and flowers were the study of his childhood, and they continued to be his delight through advancing years. "Cherish," said Schiller, "the dreams of thy youth." It was just those dreams which Mr. Emerson did cherish. His sincerest pleasure was in direct intercourse with nature. The fields and the forests had ever for him an inexhaustible beauty; but such was his natural taste for scientific exactness, that he was constantly busy in the pursuit of facts, and indefatigable in tracing every step

in the whole chain of evidence in his original investigations. Cherishing this spirit, the universe to him was never disjointed and purposeless. On the contrary, he found completeness and harmony everywhere. The external world, as he looked upon it, appeared like an illuminated missal. Often he seemed to be reading — as in a living epistle — messages from God. As he traced the law of development through seed and bud and plant, he was brought face to face with that Divine Intelligence which is alike the creative spring and living soul of the universe. Such, indeed, were the dreams of his youth, — dreams to which he had been ceaselessly true, and which he devoutly cherished in the maturity of age. And now that he has departed, how beautiful is the thought that his memory will be ever associated with the loveliest objects in nature!

Familiar as Mr. Emerson was with both the agricultural and botanical products of New England, he could not be satisfied with any thing which might even appear as superficial. He therefore devoted ten and twelve weeks through nine successive summers to explorations over the whole Commonwealth of Massachusetts, from the hills of Berkshire to Martha's Vineyard, and from the banks of the Merrimac to the shores of Narragansett Bay, while he penetrated through all the adjoining States and left nothing undone which might add to the value of his investigations. The full report, published by order of the Legislature, in 1846, was widely welcomed, and after the lapse of a quarter of a century it still retains its popularity; while the recognition of its literary merit and its substantial worth will cause it to be handed down from one generation to another. And this may be true even though other able reports should be written to meet progressive requirements.

One of the last labors of Mr. Emerson's life was carefully to revise the whole work, sparing no expense to have its information complete down to that time, and its illustrations such as should reflect honor upon the country. These volumes, for exactness of knowledge, thoroughness of detail, perfection of typographical finish, artistic skill and con-

summate genius in the illustrative drawings, with a perfect adaptation to the purpose for which the book was prepared, render the whole work a fitting monument to the memory of the writer.

We remember well an incident that occurred at the time of Mr. Emerson's researches. The trees of New England was the subject of conversation; a theme which with him never became exhausted. He called attention to Spenser's "Faerie Queene," and then turned the conversation upon Henry Hallam, whose truthfulness in matters of criticism was generally beyond question. He now invited our thought to Spenser as referred to by Hallam in his "Introduction to the Literature of Europe in the Fifteenth, Sixteenth, and Seventeenth Centuries," and cited the following words by Hallam: "Spenser seems to have been sometimes deficient in one attribute of a great poet, — the continual reference to the truth of nature. This objection is true of the stanza enumerating as many kinds of trees as the poet could call to mind in the description of a forest." Hallam then quotes the entire stanza, beginning, —

> "The sailing pine, the cedar proud and tall,
> The vine-prop elm, the poplar never dry."

"Every one knows," he says, "that a natural forest never contains such a variety of species; and never could such a medley as Spenser has brought together from all soils and climates long exist, even if planted by the hands of man."

Mr. Emerson was familiar with a natural forest within a few miles of Boston, where every tree named by Spenser stands both firm and in good condition. In Europe all these trees might not be found in near companionship; but in New England they illustrate the poet and verify his truth. If Henry Hallam had been here, it might have impressed him strangely, and his superfluous comment on Spenser could have been spared.

Mr. Thomas T. Bouvé, President of the Society of Natural History, in paying a just tribute to Mr. Emerson, dwells upon his services rendered to the State, and among these,

speaks of the exceeding value of his botanical labors. He writes: —

"The Report is not only admirable in its scientific features, but is most charming from a literary point of view. It takes one out with the writer into the fields and woods, and makes the reader at once the interested student and the personal friend, so to speak, of the tree or shrub which the writer may be describing at the time."

Mr. Emerson's remarks upon our forests, their uses, and the importance of their preservation, are of peculiar interest and value, especially at this time, when often, through culpable neglect and carelessness, thousands of acres are swept away by fires, covering with desolation vast regions of country. Wholly aside from the attractive beauty of our forests, they have an immense effect upon soil and climate and atmosphere. Their influence upon the electric forces, and the amount of rain-falls, affecting seriously brooks and rivers, is far beyond the general estimation. All that Mr. Emerson says under this head is of incalculable importance, and fortunate will it be for the country if his words of warning are heeded.

In the spacious building of the Society of Natural History one of the leading attractions is the Botanical Department, containing over fifty thousand specimens. Mr. Emerson contributed to this collection not only valuable botanical works, but a complete set of the illustrations from the last edition of his work. These were selected from the best impressions, and appropriately framed. In this hall and gallery Mr. Edward T. Bouvé has arranged several hundred admirable specimens of the wood, the leaves, the flowers, and the fruits of New England. Nothing can surpass the skill and taste manifested throughout the whole arrangement. The fibres and tissues and whole structure may here be seen. Transverse sections of each tree are given. Here the methods of growth may be traced and individual peculiarities examined, and each student may pursue his investigations to the greatest possible advantage. The delight which Mr. Emerson's extended Report awakened, led, as one of its results, to the careful gathering of these specimens, and to their

exquisite preparation and careful scientific arrangement. The sections of wood are so artistically cut and polished, that the internal structure becomes, as it were, transparent, through this lifelike presentation. This collection, embracing even now nearly every plant and tree of New England, in the order in which Mr. Emerson describes them, is in itself one of the most beautiful tributes any book could receive. The following letters from the father and son will add whatever further information may be needed; while they also prove the deep gratification thus imparted to Mr. Emerson, and the heartiness of his thanks for what had been done.

BOSTON, Jan. 28, 1882.

MY DEAR MR. WATERSTON, — Father tells me that you desire to know the connection which Mr. George B. Emerson had with the collection, at the rooms of the Society of Natural History, of the specimens representing the woody plants of New England. In order to give you a just idea of the matter, I shall have to go back some time, and say that a number of years ago father suggested to me the collection, and preparation for a cabinet, of the *woods* of the Massachusetts trees and shrubs. This suggestion I at once commenced to act upon; and, taking Mr. Emerson's most delightful Report for a text-book, I soon found myself deeply interested in making a full collection, not only of the woods of different trees, but of every thing necessary to the foundation of a complete herbarium; that is, of course, the leaves, flowers, and fruit of the various species.

I began to do this for myself, but father soon spoke of something that he wished might be done for the Society, in a way that was, I think, novel in this country; that is, the arrangement of an herbarium to comprise the woody plants of New England, so that they might be seen and studied by visitors to the Museum, in exhibition cases like the other collections.

In accordance with his desire I immediately began work upon such a collection in connection with the preparation of the woods themselves, and have for the past few years been engaged, as time allowed, in gathering through the summer, and arranging and mounting under glass in winter, such specimens as I have been able to obtain.

Father early told Mr. Emerson of what had been done, informing him of my strong desire to illustrate, so to speak, his "Report on the Trees and Shrubs," which I have always looked upon as one of the

most charming of books; and Mr. Emerson was very much gratified, both that the collection was being made, and that it had reference to his own work so nearly. He spoke to me with great warmth on the subject whenever it was my good fortune to meet him, and testified in another way his interest by sending to the Society, to be placed with this collection, a set of the superb illustrations to his new edition of the "Trees and Shrubs."

It was his earnest desire that I should be able to finish the collection while he was yet living, so that he could see it done; but, alas! it was not possible. My time is closely occupied, and I have been latterly less able to give attention to this work than it was in my power to do some years since. Besides this, the specimens necessary to the completion of the collection are rare ones, many of them Alpine species not easily obtainable. I am unwilling to put specimens on exhibition unless I have collected and studied them out myself, thereby feeling secure of there being no mistake as to identity.

Something, however, is being done every year, and I hope that the collection may be completed within a reasonable time.

So far as this work at the Society may be deemed of value the credit belongs largely, if indirectly, to Mr. Emerson, through the inspiration derived from his book; and to my father is due the fact of there being such a collection at the Museum, both through his desire expressed to me at first, and through the continual incitement of that interest, that aid, and that companionship in rambles after specimens and in investigations, which has been and is more delightful to me than I am able to express.

With great respect and very great regard,

Yours truly,

EDWARD T. BOUVÉ.

BOSTON, Feb. 3, 1882.

MY DEAR MR. WATERSTON, — I do not know that I can add any thing to what has been expressed in the accompanying letter, which will be of service to you, beyond stating that our dear departed friend manifested to me very strongly his delight in knowing of the work upon which my son was engaged. I had the pleasure of first taking him to the room where the collection was placed on exhibition, and of stating to him that though it was intended to embrace all New England species, yet my son and myself had been led to its formation by the desire to have his grand work on the "Trees and Shrubs of Massachusetts" illustrated by natural specimens, so that students of that work would be aided thereby.

After hearing my remarks, and quietly examining the collection, as we were descending the stairs leading to the main hall he suddenly stopped, and turning to me very warmly and with much emotion, said, "Why, I never had so great a compliment paid me." I think I quote his very words. That he felt strongly all he expressed, I am sure; and it is a great pleasure to me to know that the work of my son contributed so materially to his happiness even for a brief period.

That he continued to appreciate what was doing and had been done, was shown, I think, by his inviting me to come to his house and designate what botanical works from his library would be serviceable to the Society, and by the subsequent presentation of the same.

The donation was of great value.

If what my son or myself has expressed is found of use to you in the memorial upon which you are engaged, we shall both be delighted.

And now, my dear sir, with assurances of great respect and esteem, I sign myself, as ever,

Your friend,

THOMAS T. BOUVÉ.

In a letter from Mr. Horace W. S. Cleveland,* of Chicago, is the following statement respecting Mr. Emerson, — a description which brings him very vividly before us, and shows how strong was the personal attachment which grew up between himself and the friends he most valued.

"Mr. Emerson's friendship with my parents began in Lancaster, where a school had been established in which my father was greatly interested. Having been requested to select a teacher, he applied to his friend President Kirkland, of Harvard University, who recommended Mr. George B. Emerson. At his home in Boston, I was always sure of a cordial welcome; and when at a distance, he never failed to keep up an occasional correspondence, manifesting always a warm interest in my affairs, and ready at all times to give me the

* Mr. Horace W. S. Cleveland was the son of Captain Richard J. Cleveland, whose energy of character was made known by his interesting "Narrative of Voyages and Commercial Enterprises," published many years ago. Mr. Horace W. S. Cleveland is widely known as Director in the Adornment of Public Grounds in Chicago and other cities. He is the author of a treatise on Forest Culture, and has written ably and earnestly on the preservation of our fast-disappearing forests. Other publications on kindred subjects he has given to the public, of great interest and importance.

aid of friendly counsel, which his wisdom and experience rendered most valuable.

"One of my earliest works at that period was designing a plan for a tract of land belonging to him in Winthrop, Massachusetts. I well remember my keen sense of pleasure at his expression of satisfaction with the result.

"As I grew up, Mr. Emerson's kindness was paternal, especially during the frequent absence of my parents. In after years, when I had a farm near Burlington, New Jersey, he paid us a delightful visit. Most heartily he entered into all my plans and theories of horticulture, and was specially interested in examining the trees in that section of the country. Several very fine tulip-trees excited his admiration, as did also the liquid-amber tree, which grows there in great perfection. There was a magnificent hemlock on my farm, seventy feet in height and a dense mass of evergreen foliage. Mr. Emerson visited that tree daily, examining it on all sides, declaring it to be the finest specimen of hemlock he had ever seen, and affirming that it was worth a journey from Massachusetts to visit it. . . .

"During the years that followed, his friendly interest continued undiminished; and after my removal to the West, and especially while I was engaged on the construction of the South Park, at Chicago, he entered into the spirit of the objects I was trying to achieve, as if they had been his own conceptions.

"He twice visited me during that period, and the last time under circumstances of peculiar interest. He was within a few months of eighty years of age. He spent several hours inspecting what had been done and in discussing my future plans. It was a rare opportunity to converse with one who was familiar enough with forestry to grasp the conception of future results. He entered into my ideas of possibilities where every thing had to be created out of a nearly level prairie. . . .

"A new bond of friendship seemed to exist between us in the sympathy of our tastes for natural beauty, and the study of the laws of growth. His letters to me were full of suggestive matter, evincing the closeness of his observation and the justice of his conclusions; but all those letters, together with a beautifully bound copy which he sent me of his 'Trees and Shrubs of Massachusetts,' were among the treasures which I lost in the Chicago fire. . . .

"Devoting myself, as I have done, to the profession of landscape gardening, Mr. Emerson's interest in my work was throughout of great aid and encouragement. When we finally parted, I took

my leave of him with the conviction that it was my last farewell on earth, but grateful for the benediction of one so well prepared for heaven. . . .

"In regard to Mr. Emerson's work on the 'Trees and Shrubs of Massachusetts,' I have no doubt that it has exerted a wide-spread influence. Judging of its effect upon myself, I cannot but believe that kindred impressions must have been shared by very many readers. To me it was a revelation which led me to look upon trees with a degree of sympathy which might almost be termed affection. Perhaps the descriptions came home to me with the more force, from the fact of my natural love, and life-long familiarity with our native forests. Entirely independent of its scientific value, there is a permanent and pervading interest in what Mr. Emerson has written. Its perusal has always with me the same refreshing and soothing effect which the forest itself inspires. There is an influence upon the mind like that exquisite melody which may be deeply felt, while the source of its power may be indescribable. Shakespeare speaks of finding 'tongues in trees'; and it is this very language of nature which the writer has caught, the whole tendency of which is to bring the entire mind into harmony with nature itself."

The last and perfected edition of Mr. Emerson's work on the "Trees and Shrubs of Massachusetts" was dedicated to Professor Asa Gray, late President of the American Academy of Arts and Sciences. Professor Gray, in a tribute to his friend at a meeting of the Academy, May, 1881, said that the volume by Mr. Emerson in connection with the geological survey of the Commonwealth is to be counted "among the best fruits of that survey."

He then associates Dr. Jacob Bigelow with Mr. Emerson, and says: —

"The two classics of New England botany are Dr. Bigelow's well-known 'Flora' and Mr. Emerson's treatise on the 'Trees and Shrubs of Massachusetts,' both side issues from active professional life; both unusually successful in the combination of popular with scientific treatment of their subjects, and in the extent of their influence in this community, as also in the appreciation accorded to them by scientific men."

Alluding to the progress which had been made in the natural sciences during Mr. Emerson's lifetime, the deeper and larger questions which had been dealt with by new methods and exacter researches, Professor Gray adds: —

"To the advance that has been made within the last forty years and more, Mr. Emerson's helping hand and his weighty influence have largely contributed."

From so exact a scholar, and one of such unquestioned authority, no added commendation is needed.

Soon after the new building connected with the Society of Natural History had been completed, and the dedicatory services had taken place, a new proposition was brought forward. The purpose was publicly urged to make this institution more emphatically an educational power in the community. There were members of the Society, among whom was Mr. George B. Emerson, who were not satisfied that these rare collections should be left to yield only a momentary gratification, to be considered as mere curiosities for the entertainment of a passing hour. They felt rather that they should be studied as the monuments of past ages, the authentic record of a world's history; that teachers especially should have here every opportunity for study; and that lectures from the ablest men should aid their investigations, presenting every advantage by which their pupils should receive the benefit.

This movement led to a series of lectures by eminent men of science, who, aided by the invaluable specimens here arranged, were listened to with profound interest by more than six hundred teachers; and one may realize how wide must have been the influence thus exerted, when it is remembered that twenty-seven thousand children were under the daily care of the teachers thus assembled.

Professors Jeffries Wyman, William B. Rogers, Augustus A. Gould, Asa Gray, were among those who lectured; and at the introductory meeting the Governor of the Commonwealth, John A. Andrew; the Mayor of the City, F. W. Lincoln;

and President Hill, of Harvard University, made impressive remarks. The ablest scientific men in the country gave to this movement their most cordial support. It is a great satisfaction to know that the effort made at that time exerts an unabated influence to this day. It was the inauguration of a new instrumentality, and the interest deepens as time goes by. So strong is the conviction of its utility, and the demand for instruction is so great, that a portion of the Lowell Fund has been generously appropriated to carry on the work.

Mr. Emerson had the strongest sympathy with the whole movement. He took part in the introductory meeting. His letter accepting the invitation is so cordial and modest, that it seems like hearing his voice once more to read it.

3 Pemberton Square, March 16, 1865.

Rev. R. C. Waterston.

My dear Sir, — Your very kind note of the 12th came to me yesterday.

In behalf of the teachers, whose elder brother I am, I thank you for the interest you have shown in them, and at the same time I would thank you for doing so much to bring the subject of Natural History prominently forward as something to be thought of by teachers. I believe that one of the defects of teaching at present is in the neglect of it.

The programme of lectures is excellent; indeed, it could not be improved. The rich and accurate stores of knowledge of Wyman and Gould, and the ready eloquence of Rogers, give promise of very attractive and valuable lectures. I have never heard Mr. Scudder.

I shall endeavor to be present at the place and hour you indicate, and mean to come prepared to speak if it should seem desirable. My organ of language is so poor, that I always find it better to say nothing, if others can be persuaded to speak upon the subject I have been revolving; especially if I can have an opportunity of suggesting thoughts in conversation.

Very truly yours,

Geo. B. Emerson.

Mr. Emerson's convictions in regard to the teaching of Natural History will find best expression through his own words: —

"The relation between the mind of man and the universe in which he is placed by the Creator of both, is established for wise purposes, which it becomes us to inquire into and reverence. The volume of nature, with its infinite variety, is spread out before the opening eye, every page teeming with interest, inviting and rewarding inquiry. Every object is full of beauty, every sound has an echo in the heart of a child. Its simplest elements are level with the meanest capacity, and can be grasped by the weakest hand; while its exhaustless abundance fills the most mature mind and taxes the strongest."

And then, not willing to confine either himself or others to any narrow field of inquiry, he adds: —

"Study plants, birds, shells, rocks, any thing that is God's workmanship. Do not for a moment think that the study of his works, pursued in a right spirit, can fail to bring you nearer to Him."

These lectures, commenced by the Society of Natural History eighteen years ago, with the apprehension on the part of many that they would probably endure but for a very brief period, never, in fact, have been so prosperous as at present; and now that so large a number of able teachers give practical evidence of their attractive power, it is doubly pleasant to recall Mr. Emerson's interest in their inauguration, and the earnest manner in which he gave them both his sympathy and support.

The world upon which George B. Emerson entered in 1797 can hardly be considered the same as that from which he departed in 1881, so vast and rapid had been the advancement in nearly every phase of society. During this period a nobler type of civilization was developing itself. An unprecedented activity was perceptible on every side.* Hardly a day elapsed without some scientific or mechanical discovery. The realms of space were penetrated. The most complex elements were analyzed. The upheavals of remotest epochs

* See in the Supplement a statement upon the Growth of the Country, Railroads, Telegraphs, Telephones, Discoveries, and Inventions during Mr. Emerson's lifetime.

were read in the formation of the planet, while the kingdoms of nature, through every clime, revealed their secret laws. The seed scattered by master minds had taken root and was fast making visible its results. New forms of industry were springing into being, and the forces of the material creation were rendering cheerful obedience to the will of man. Oceans and continents were becoming more and more closely interwoven, while electric thought, annihilating space, encircled the globe. To-day the farmer in his field gathers his harvest by machinery, the housewife by her fireside has ways once unknown of replenishing her wardrobe, while the printing-press scatters its products like snow-flakes over the nations.

Mr. Emerson's life, arching over more than eighty years of the nineteenth century, led him to see changes such as the world had never witnessed before. Under all these influences his career shaped itself. His thoughts in no small degree were thus marked and moulded, and his whole life and character received a coloring from the peculiar incidents through which he passed. Not that he was the passive creature of external circumstances; but with his sympathetic and receptive nature he was alive to influences, and from the nobler tendencies of his being he assimilated what was best. That which was elevating and enduring became his nutriment, and was converted into individual life and creative energy. He looked upon living thought from whatever quarter it came, studied it, opened his heart to it, and made it his own; yet he both reflected and acted for himself. When he studied trees or flowers it was to the forest and the hillside he went. If at midnight he was still engrossed over Xenophon and Herodotus and the Odyssey,— depriving himself of sleep and rest, — it was to embody that fresh knowledge and power which should aid in the work of progress both individually and socially. The impulse of the century stirred him, and he in turn sought to extend and multiply that impulse over his time. A century which for mental activity and scientific achievement has never been surpassed, found in him a worthy recipient and a faithful promoter.

He felt that no privilege could be greater than to participate in such experiences. The love of knowledge blazed within him like an inextinguishable flame whereat he would allow all others to light their tapers or kindle their fire. This was a predominating passion; but whatever information he acquired he was eager to put to a generous use. To gain and to impart, were ruling principles of his life. Two things to him had a sacred import: to learn and to teach, — to learn all that was true and good, and to impart as much of it as might be in his power. Quiet in his manners, considerate and well-balanced, he united untiring industry with an absolute devotion to duty.

To instruct was a natural impulse of his being. He was a born teacher. There seemed to him no higher sphere or holier vocation than that which enabled him to enlighten and elevate the minds of others. Thus for more than forty years did he devote himself faithfully to his great work. In no merely artificial manner was that labor performed. Not the written rules of text-books were his arbitrary guide. His knowledge was full of life. Mind communed with mind. Enthusiasm was kindled, awakening at the time, and leaving behind it, an indescribable charm. He called forth that true sympathy which binds heart to heart, and which, amid all after changes, is never forgotten. In a community familiar with the best teachers he was second to none. Gentle and true in all he said and did, it was not simply what he *taught*, but what he *was*, that gave him his exalted position. There was a calm dignity which made his presence attractive, while his evident sincerity commanded confidence and respect. His pupils became, in after life, scattered widely over this country and in Europe, and we believe not one was ever known to speak of him without lasting gratitude and unqualified affection.

To other teachers and to the public generally his words upon the subject of education always carried great weight and were received with peculiar respect. His labors in this way were constant and varied, and it would be difficult to estimate the good that must thus have been accomplished.

One great means of influence which he possessed, was the leading minds that were naturally drawn to him, by whom and through whom he, almost unconsciously to themselves, exerted power. Men of the highest culture, citizens of the most responsible positions, prized his companionship. Probably in no community could a larger circle of influential persons be found than in that section of the country where he resided,—those who by their active philanthropy and judicious benevolence labored willingly for the public good. With all such generous and noble-hearted citizens Mr. Emerson was a special favorite. They desired his sympathy, sought his counsel, and were eager for his co-operation; and no one was more ready to give both time and effort, or to devote them more wisely, than he.

After Mr. Emerson had taught school for more than forty years, his friends persuaded him that he needed rest, and that he ought to visit Europe. Many of his tastes pointed in that direction. His familiarity with history, science, and literature must have given, through all his journeyings, a fresh impulse to his mind; while his intimacy with both the ancient and modern languages enabled him to converse freely everywhere with men of letters, the artist and the artisan. England, France, Germany, Italy, were to him all crowded with interest. We remember meeting him in the midst of these attractions and rejoicing at the vigor of his thought. In Paris he gave us an account of his visit to Rome. We recall the fact that he dwelt particularly upon the Forum and the Colosseum, describing the plants and flowers he had gathered there, counting as high as three hundred. Other collections he had made from the Campagna and the Palace of the Cæsars. Four pleasant months were passed in Rome, wandering through galleries, clambering over ruins, penetrating catacombs, musing in St. Peter's, and searching through the untold wonders of the Eternal City. At Naples he ascended Vesuvius, looked down into its burning crater, and off over its incomparable view,—a scene which seemed like some spell of enchantment. He visited Pæstum, and beheld the temples which had met the storms of twenty centuries; and he found

his way through Etruscan towns which have stood for ages, and where the wild flowers awakened his admiration. He would fill his carriage with plants and vines, that he might have an opportunity, on returning to his rooms, of examining them more at leisure. In the different countries he visited, such was his familiarity with the languages spoken, and so readily did he adapt himself to the manners and customs of the people, that they considered him as one of themselves and almost forgot that he was a foreigner.

In visiting Germany he gave minute examination to the schools, watching every step taken, whether by teachers or pupils, day after day, and often from morning to night. As one result, he was satisfied that the schools in New England had no reason to shrink from a comparison with them.

He returned from his foreign travels with a strengthened determination to make himself useful to others. That he was true to this purpose, all will testify who knew him. To do good seemed to be with him even more profoundly than ever a prevailing motive.

In 1870 Mr. Emerson, in company with Dr. Jacob Bigelow, then in his eighty-third year, visited the Pacific coast.

In their youth, the Mississippi River might well have appeared almost beyond reach; now it was but as a starting-point. Then the Rocky Mountains seemed inaccessible as the Himalaya; now, as their dark sides were lifted against the sky, the railroad could be seen winding over them. Here, after leaving Cheyenne, high up among the mountains, at least seven thousand feet, is the plateau known as Laramie Plain. It is a little curious that the number of flowering plants here is recorded as three hundred distinct varieties,—exactly the number Mr. Emerson had found in the Colosseum on his visit to Italy. What possible contrast could be greater than the two scenes,—their aspect, history, and associations! From thence the travellers went to Salt Lake City and the Mormon Tabernacle. They visited Council Bluffs, Echo Canyon, crossing the Alkali Plains. They ascended the Sierra Nevada and passed down the western slope. They

were at San Francisco, Calistoga Springs, Sacramento, and Copperopolis. They studied the characteristic features of the redwood-trees and the *Sequoia gigantea.* It is difficult to comprehend what must have been the impression made upon minds like theirs by objects so novel and on so vast a scale. They reached home without an accident.

Without dwelling, at present, upon the Civil War,* which formed so momentous an event during the latter part of Mr. Emerson's life, we will ask attention to but one movement which was most beneficent in its results, and in which he was actively engaged. From the very beginning of the war large numbers who had been slaves were thrown out of employment and needed both advice and instruction. Promptly through the whole North and West, associations were formed for the aid and direction of the freedmen. Many persons, both male and female, volunteered as teachers, ready to leave their homes and endure any hardships if they could be of service. The chief object of the Educational Commission was the industrial, social, intellectual, moral, and religious improvement of persons released from slavery in the course of the war for the Union. Mr. Emerson was from the commencement of this movement intimately associated with it. He held the responsible position of Chairman of the Committee on Teachers, and in his reports he expresses his views upon the duties before them, and the result of what had been done. He states that "the blacks upon many of the plantations had been deserted by their former masters, and were without control or guidance. No system or order had yet been introduced into their habits or their methods of labor. The life of dependence which they had so long led had unfitted them for the time, with few exceptions, for independent action on their own account."

Both at Port Royal and the Sea Islands the work of instruction was carried on systematically and extensively, and with most gratifying success. At Port Royal Mr. Edward L. Pierce (since so well known on both sides of the Atlantic

* See in the Supplement further remarks upon this period.

by his biography of Charles Sumner) acted as superintendent, with thirty-one teachers. Every thing was done which an enlightened policy and humane feeling could dictate. Other teachers were soon sent, making the number at Port Royal seventy-two. From two to three thousand children received instruction in the schools. Teachers were also at work in Fortress Monroe, at Washington and Alexandria, and other places. The number of persons ready and anxious to engage in this work was very great. Mr. Emerson states in his report that hundreds of letters had been received, many from persons of the highest qualifications, desirous to labor in so interesting a field, and willing to endure personal hardships and to make any sacrifice. "It was soon apparent," he writes, "as had already been anticipated, that the instruction most needed by the blacks was not in the knowledge of school-books, but in that which should lead them to appreciate the advantage of civilized life, to relinquish the habits and customs of slavery, and to learn the duties and responsibilities of free men."

In the work in which Mr. Emerson was actively engaged, more than a thousand teachers were employed throughout the South, imparting instruction to over one hundred thousand persons, both young and old.

During the memorable period of Mr. Emerson's life, may it not justly be said, that he witnessed, if not the formation of a national literature, the preliminary steps to such a desirable consummation? In the days of his early youth, and even in his advancing manhood, nearly all books printed or read in America were written by authors associated with other countries. Even the books that were written here, were for the most part modelled upon foreign standards. The leading minds of other lands were naturally the guides of our intellectual life. History, biography, poetry and prose, and all the different phases of literature, came to us as a matter of course from beyond the Atlantic. The time had not yet come for an original growth. The Reformation, the Revival of Learning, the "golden age" of Elizabeth, the men of sci-

ence and philosophy, were our rich and abundant resources. With such treasures within reach, it was a temptation to *reproduce* rather than to *create*. Through all nature there are separate stages of growth. Each period in a country's history has its own work. First are the pioneers, by whom forests are to be felled and lands cleared and cultivated; then comes the promotion of social order and the development of civil institutions; then every variety of manual labor, agriculture, traffic, commerce; then the great questions of human rights, with the struggle for progress and freedom. These are practical problems to be solved, and for the time are supreme. Native authorship with original strength and vigor, kindling with individual genius, will ripen in due time. There is a fitting season for preparation. One period becomes the essential precursor of that which follows. Down to the opening of the nineteenth century there was in this country all that answered the immediate want. But with the increase of intellectual activity came a new development of original power, a freshness of imagery, strength of thought, masterly methods of presentation, and the undeniable impress of creative genius; not simply a transplanting from other lands, but the adoption from various literatures of whatever elements are best, with a new spirit superadded, embracing in its comprehensiveness both depth and breadth, breathing the aroma of the woods, and reflecting, through all, the life and spirit of the time. Mr. William Cullen Bryant as late as 1817, when Mr. Emerson was twenty years of age, in referring to the prominent American poets of that day, names, in all honesty, Dwight, Barlow, Trumbull, Humphreys, Clifton, and Honeywood; and he speaks of a Dr. Ladd of Rhode Island, who was much celebrated in his time for poetical talent. Contrast this poetical literature with what has since become familiar to every mind, through the productions of Bryant, Dana, Longfellow, Lowell, Whittier, and Holmes, and many others whose writings are now as well known beyond the sea as in our own land. We will not venture to expatiate upon this theme. Neither need we speak of Washington Irving, or Ralph Waldo Emerson, or Nathaniel Hawthorne,

unsurpassed in their way; or of historians like Sparks, and Prescott, and Motley, and Bancroft, all of whom, during the life we are considering, did a marvellous work in perfecting the literature of their country and time, and stamping it with a national character.

It is understood to have been through Mr. Emerson's influence that his friend, Mr. James Arnold, of New Bedford, left the munificent bequest upon which the Arnold Arboretum at Cambridge is founded.

In 1859 Mr. Emerson received from Harvard University the degree of Doctor of Laws. He was early elected a member of the American Academy of Arts and Sciences, of which through many years he continued a valued associate.

We have traced his career through one of the most eventful periods of history, and have seen that he did his part to secure, both to the individual and to society, the advantage of positive knowledge. He united in all his studies an unwavering love of truth, with quiet self-control, and conscientious fidelity.

These qualities of his character have a yet deeper significance when we recur to his domestic experiences, and know how often, in the midst of his many duties, the sanctity of his home was overshadowed by great bereavements. In 1823 Mr. Emerson married Olivia, daughter of the Rev. Dr. Buckminster, of Portsmouth, New Hampshire, and sister of the Rev. Joseph Stevens Buckminster, one of the cherished names of New England. Mrs. Emerson died in 1832, leaving three children. George, the eldest son, was graduated with distinguished honors at Cambridge, in 1845; after spending two years in Europe, he died in 1848. Francis, the second son, took his degree at Harvard in 1849, and died in 1867. The only daughter, Lucy, survives, and is the wife of Judge Lowell. In 1834 Mr. Emerson married Mary Flemming, daughter of the late William Rotch, of New Bedford, sister of Mrs. James Arnold, a name associated, by Mr. Arnold's generous bequest with the Cambridge Arboretum. In these events are suggested

to us joys and sorrows which imparted added tenderness and depth to a nature that had faith wisely to accept them.

After a life crowded with usefulness, George B. Emerson died March 4, 1881, at the advanced age of eighty-four. He had known the sharp anguish of being separated by death from those very dear to him, but he had met even his severest bereavements with a firm trust. Never had his mind been darkened or imbittered by grief; rather through such discipline was his faith strengthened, and his whole nature led into closer communion with Heaven. Thus advancing years, while they brought incidental feebleness, became associated also with accumulated blessings, while he had

> "That which should accompany old age,
> As honor, love, obedience, troops of friends."

Those who, through his active life, had been his co-workers, felt deeply his loss; while the young, who had been taught by his wisdom, dwelt fondly upon his memory, always cherishing with their sacred recollections, a sense of profound indebtedness and grateful affection.

His whole life had portrayed the attractiveness of truth. With clear perceptions and calm judgment he had been faithful to his highest convictions. Sincere in his goodness, each duty had been fulfilled with undeviating integrity. Thus even to his last days he was tranquil and happy. The kind Providence that had watched over him through all his pilgrimage was still with him to smooth his pathway, showing him, at times, visions of his celestial home. With brightest anticipation did he pass into the glorious future: —

> "His riper age
> Marked with some act of goodness every day;
> And, watched by eyes that loved him, calm and sage,
> Faded his late declining years away.
> Cheerful he gave his being up, and went
> To share the holy rest that waits a life well spent."

SUPPLEMENT.

INTRODUCTION.

In preparing, at the request of the Massachusetts Historical Society, the preceding Memoir of Mr. George B. Emerson, the writer adhered closely to the thread of the narrative. Additional statements are here introduced in the form of a Supplement, some referring to circumstances and facts which, more or less directly, affected his career and tended to give a coloring to his whole life.

No man can be properly understood except by measuring him with the period in which he lived. We must know the condition of society in which he acted; how it influenced him, and how he, in return, was affected by it. No man is entirely independent of existing circumstances; they all help to modify the character. Some natures are doubtless more impressible than others, and according to the quality of the mind will be the character of the effect produced. All outward circumstances in some degree act upon the mind; and the mind, in its turn, reacts upon them. Every strong nature has a controlling force which rules from within, stamping itself indelibly upon its time. So also with the master spirits of the age, the impressions they receive, and the influence they exert; how they act and how they are acted upon, must be studied and understood.

There were two individuals, most extraordinary in their position and character, — one in the Eastern and one in the Western Hemisphere, — who presented in every respect the greatest possible contrast, and who were emphatically the exponents of their time and of the hemispheres in which they lived. The one covered the heavens with a lurid glare; the other shed over all a genial and healthy glow. The latter

had created for his country a new era; gaining for its people not only great opportunities, but, above all, constitutional liberty. His life and the life of Mr. Emerson met. They were interlinked, and those two lives united (covering together one hundred and forty-nine years) take us back to the period when the vast region beyond the Alleghanies, including the valley of the Ohio and the wide sweep of the Mississippi, — the river in itself over three thousand miles in length, — with an area of between two and three million square miles, together with the extended northwest, and the whole realm of the Rocky Mountains, even to the shores of the Pacific Ocean, was one unbroken wilderness, inhabited by savage tribes. Those two lives embrace the astonishing extreme between what then existed and what we may now see. The whole growth of the country, through that period, opens to the thought a marvellous history.

The life of a man resembles in some respects that of a city. It is not simply the crowded streets and squares that impart to a metropolis its interest. The question will present itself: Has it a history, recollections, traditions? The settlement known once as "Trimountain," and which the Indians called "Shawmut," has it nothing but a material existence? Is there no attraction beyond what meets the eye, or is there a life reaching into the past? Why do men ask where Franklin was born, where Hancock lived, and from what church spire the lantern was hung that gave the signal for Paul Revere's ride? Who will tell us the position of Blackstone's farm; or point out the favorite walks of Sir Henry Vane; or bring back to our imagination the impassioned eloquence of James Otis and Samuel Adams; or recall John Cotton as he preached here on market days at the old Thursday lecture, or before that, for twenty years and more, under the Gothic arches of St. Botolph's, in Lincolnshire? or are we carried, in thought, out of Massachusetts Bay, around Cape Horn, and along the Pacific coast, until, in the far Northwest, we behold the discovery of the Columbia River? Does not all this make part of Boston, and add to the charm that binds us?

What to us would be the little town of Palos, if we forgot that Columbus sailed thence to discover America?

Even Rome, with the Vatican and St. Peter's, the Coliseum and the Forum, — what would it be without its shadowy and majestic past? and is it not something to remember that Paul "dwelt there two whole years in his own hired house"?

Following this Introduction will be found various statements and facts bearing more or less directly upon the time in which Mr. Emerson lived. These, it is believed, will serve to illustrate more fully the period with which he was identified, while others may act as side-lights, bringing out with added force the features of that portraiture which it has been the purpose of the preceding Memoir to delineate.

Mr. Emerson's life covered so large a portion of the nineteenth century, and witnessed such an unprecedented expansion and progress in the country and the age, that it is thought the facts presented may have more than a passing interest. With this impression they have been brought together, and are herewith respectfully presented to the reader.

NAPOLEON.

HIS CONQUESTS IN EUROPE, AND IMPRESSIONS MADE BEYOND THE ATLANTIC.

WHEN George B. Emerson was an infant in his cradle, Napoleon, with an army of forty thousand men, had landed in Egypt; and as the rising sun lighted up the minarets of Cairo and shone upon the Pyramids, Napoleon, never unmindful of effect, exclaimed: "Soldiers, from those summits forty centuries are looking down upon you!" After a desperate struggle and terrible slaughter, Cairo was taken, and the whole of Lower Egypt was conquered. Then the monuments of antiquity were ransacked, while treasures of art and plunder of every description, as the trophies of conquest, were forwarded to Paris. The "Battle of the Nile" followed, in which Nelson utterly annihilated the French fleet. To Napoleon this was a terrible disaster; and, thus cut off from the present possibility of return, he resolved with ten thousand men to press forward over the desert sands into Syria. Here Gazah (the ancient city of the Philistines) and Jaffa (the Joppa of Holy Writ), after a desperate fight, were obliged to surrender. Suddenly following this came the siege of Acre. Sir Sydney Smith, who had been cruising in the Levant, united with the defenders of Acre; and the French, after various unsuccessful assaults, with heavy loss, were obliged to retreat. Napoleon, enraged and bitterly disappointed, his army suffering, at the same time, from famine and pestilence, to the best of his ability made his way back to Cairo.

Previous to the invasion of Egypt, Napoleon had carried his conquests into Italy; where, with impetuous fury, he swept over the rich plains of Lombardy and Piedmont,

with great carnage taking rapid possession of Milan, Mantua, Modena, Bologna, Trieste, and Venice, — bringing them all, with their surrounding provinces, into absolute subjection.

Such were the events of which Emerson heard the recital in his early childhood and advancing youth. Those events, which were then the stirring occurrences of the time, were naturally an absorbing topic of thought. By speedy strides the soldier of Corsica became General, First Consul, and Emperor. With unparalleled daring and consummate skill, the ambition of this man seemed absolutely boundless. Even while ruling with despotic power over a large portion of the continent of Europe, he was ever eager for new acquisitions. Nation after nation was humbled at his feet. Province after province was added to his empire. Crowned heads, subjugated by his advancing armies, were forced to comply with the most exacting requisitions; yet while there was one thing left which he had not brought wholly under his sway, his extended hands ceaselessly grasped for more. What then was to be expected next, and what would be the end?

In the days of Mr. Emerson's boyhood the Supreme Court of Massachusetts had two circuits every year into Maine, the judges holding their court at York, quite near to his father's dwelling, under whose hospitable roof they often passed their evenings; where gentlemen distinguished for their character and ability united with them in the social interchange of thought. How frequently, at such times, the conversation must have turned upon the latest news from beyond the Atlantic, — some new country overrun and conquered, some perplexed monarchs dethroned, some additional dynasties created! Now special edicts were considered; and now separate deeds came up for judgment, such as the deliberate shooting of the prisoners at Jaffa, or the cruel fate of the Duc d'Enghien at the fortress of Vincennes, or the heartless divorce from Josephine. Now the splendor of Napoleon's genius was the subject of remark, his military acumen, his administrative and executive ability, his unending toil, his unexampled perseverance, his unflinching defiance of danger; and again his intense and unmitigated selfishness,

his unscrupulous use of unworthy means, and the coldness and cruelty of his nature. Now it was the potentate and the conqueror; and again it was the oppressor and the despot.

Emerson was fifteen years of age, preparing for college at the Dummer Academy, when news of the invasion of Russia with from four to five hundred thousand men, and their speedy and overwhelming defeat, reached this country. The fearful conflagration of Moscow seemed to send the light of its glaring flame across the ocean; the piercing winds and drifting snows could be almost heard and felt, and, with this, the groans of the dying. Three hundred thousand men and thirty thousand horses miserably perished. Napoleon's aim was for St. Petersburg and the fleet at Cronstadt. In his apprehension they were already his; all Russia was at his feet. As Napoleon gazed upon Moscow with its battlements and towers, he felt that now all things were within his grasp; but as the flames suddenly burst forth in every direction, secretly lighted by the hands of the inhabitants, dooming their city to ashes rather than see it in possession of the enemy, it was a death-blow to his anticipations. For him there was no shelter and no relief. The loss and the suffering that followed were without a parallel in history.

One can imagine Dr. Benjamin Allen, the able master of the Academy, calling upon the boys to pause in their studies of Latin and Greek while he related to them the facts just received. This was a lesson in contemporaneous history quite as important as any passage in Homer or Herodotus. And the boys afterwards, in the intervals of play, must have dwelt upon these scenes, and offered their comments upon these momentous events. When Mr. Emerson entered college, he found that at Harvard, as elsewhere, there was no escape from the one engrossing topic which agitated the public mind. There were questions which many might ask, but which few could answer. Was the great empire which Napoleon, with such toil and bloodshed, had gradually built upward, now suddenly to collapse and crumble? When and

by whom was its doom to be spoken? What were to be the signs of this final overthrow? An impenetrable veil yet hung over the whole future. No hand could draw it aside, yet portentous shadows flitted ominously upon the curtain!

Power, influence, authority, all had appeared to centre supremely in Napoleon. His vast dominion seemed to be consolidated upon foundations of adamant. He had exalted the various members of his own family, conferring upon them all the most commanding positions. His brother Joseph had been crowned King of Naples and Sicily, and at a later day was appointed King of Spain. His brother Louis had been made King of Holland. Lucien was Prince of Canino, while his brother Jerome had been created sovereign of Westphalia. Thus did Napoleon seem fortified on every side, while his favorite generals had also been placed in the highest possible positions of honor and trust; and, added to this, the work of aggrandizement was constantly going on. To gain new resources, other kingdoms must be won. Thus did he, unprovoked, make his desperate assault upon Russia; and by this fatal movement the magical spell which had surrounded him was broken. He was seen to be no longer invulnerable.

Through all Mr. Emerson's college days, the eventful experiences of Europe awakened an intense excitement! As the slow packet ships arrived, with how eager a curiosity must the latest news have been sought! With men at Harvard like Kirkland and Everett and Frisbie and Farrar, and with such classmates as George Bancroft and Caleb Cushing and Stephen Salisbury and Sewall and May, the expressions of opinion upon passing events must have merited a candid hearing.

The success of Napoleon thus far had depended upon his continued conquests; and the only way in which his sovereign rule could be sustained was by pressing into yet other regions the deadly work of war, all of which at length became so intolerable that the allied forces, fully aroused, combined to resist it. In 1813, the year that Emerson entered Harvard, Napoleon, immediately after his Russian disaster, with incred-

ible energy mustered an army of three hundred and fifty thousand men, and with desperate determination made his way into Germany. There, at Leipsic, was fought what is well known as the great "Battle of Nations;" one of the longest, sternest, and bloodiest battles on record, and by which the French Emperor was overwhelmed in hopeless ruin. In due time the allied forces entered Paris amid the acclamations of the populace, and the abdication of Napoleon followed.

The little island of Elba now became his appointed home, from which, however, within a twelvemonth he made his well-known escape. His sudden reappearance kindled the French people into momentary admiration, and once again came the inevitable preparation for war. Thirty thousand additional men were called for, by whom the final test was to be made. The one word *Waterloo* pronounces the decisive result. As by the crash of a thunderbolt the mighty empire was shattered. June, 1815, witnessed this tremendous conclusion. Napoleon hastened to Paris, exclaiming that all was lost. Speedily upon this followed his banishment to St. Helena. There he remained for six years, and on the 5th of May, 1821, died. He who through his many triumphs and reverses had been the master spirit and controlling power, concentrating upon himself every eye, was no longer upon the earth.

On both sides of the Atlantic that extraordinary career, thus tragically closed, was the subject of universal comment. At his approach governments had been overturned and thrones demolished. Before his impetuous attacks armies had been swept as by a whirlwind; while nation after nation, trembling in terror, had bowed down before his imperious demands. Now he was seen rushing amid the storms of battle over the bridge of Lodi; and now, with his armed hosts, he was scaling the precipitous passes of the Alps. His history throughout was connected with human affairs upon a colossal scale. Rapidity of movement and a dazzling splendor of effect took the world constantly by surprise.

Thus for twenty years, through the whole formative period of Mr. Emerson's life, Napoleon's career must have attracted to itself constant attention. It was a great drama of the nations, presenting itself, scene after scene, not as an illusion, but as an impressive reality. He saw one man, by military force, bringing nation after nation under his control, until it seemed as if no earthly power could prevent his gaining universal dominion. What a field was here for observation! what incentives to thought! How could any mind interested in the study of races, of languages, of institutions, be indifferent to such extraordinary events, transpiring on so vast a scale! What a personality was here! what capacities, what characteristics, to be measured and analyzed! That which preceded Napoleon and shaped the way for him, — the French Revolution, — what did that spring from, and what did it produce? Then the first appearance of Napoleon and his after career, — what did he propose to do, and what did he actually accomplish? how much of good, and how much of evil? Had the feudal monarchies become outgrown, and were they waiting to be demolished? Had the people been held, for the most part, in abject servitude, and were they at length passionately demanding a more adequate recognition? Were there intolerable wrongs to be redressed, and had ignorance and oppression created bitter animosities and kindled a spirit of ungovernable resentment, which were to be made the tools of a military despotism? Why were flourishing regions laid waste, and populous cities left in smouldering ruin? What in all those lands, thus desolated by war, was the condition of the people? How many questions pressed upon the mind for some honest solution!

It may be said that Europe was too far removed from America to awaken here any special interest. Nothing could be further from the fact. All that transpired abroad was closely watched. Every sign of progress was hailed with joy; each retrograde movement occasioned grief.

One instance among many may be mentioned, illustrating the intense sympathy of feeling which prevailed; not a feeling confining itself to quiet thought, but seeking public

demonstration. When intelligence reached this country of Napoleon's overthrow, the citizens of Massachusetts, by a large committee chosen for the purpose, were requested to convene at Boston. Large numbers of people having assembled, thanks were fervently offered to Almighty God for "the world's deliverance from a cruel despotism," and (as they emphatically pronounced it) "the usurped power of a ferocious military adventurer."

The gentlemen most prominent in this movement were confessedly the ablest men in the Commonwealth, among whom were the Hon. George Cabot, Thomas Handasyd Perkins, John Lowell, William Sullivan, Harrison Gray Otis, Christopher Gore, John Warren, George Bliss, and Samuel Putnam.

Not satisfied with an individual utterance of opinion and with resolutions which deliberately expressed their views, they recommended the observance of a solemn religious festival commemorative of the goodness of God in the fulfilment of this great event; and subsequently the Rev. William Ellery Channing was chosen to preach the discourse. This "solemn festival," with accompanying services, took place at King's Chapel. On an occasion of such public interest doubtless the University of Cambridge was fully represented; both professors and students would be present, and among the students no one more heartily than Mr. Emerson would sympathize with a discourse of such eloquence and power.

"Shall we be dumb," exclaimed the speaker, "amidst the shouts and thanksgivings of the world? Is it nothing to us that other nations are blest? Does the ocean which rolls between us extinguish all the sympathies which should bind us to our kind? Can we hear with indifference that the rod of the oppressor is broken? Away with this cold and barbarous selfishness! Nature and religion abhor it. Nature and religion teach us that we and all men are brethren, made of one blood, related to one Father. They call us to lift up our voices against injustice and tyranny, wherever they are exercised; and to exult in the liberation of the oppressed, and the triumphs of freedom and virtue through every region under heaven. We are not to suffer the ties of family and country to contract our hearts, to separate us from our

race, to repress that diffusive philanthropy which is the brightest image man can bear of the universal Father. God intends that our sympathies should be wide and generous. We read with emotion the records of nations buried in the sepulchre of distant ages, the records of ancient virtue wresting from the tyrant his abused power; and shall the deliverance of contemporary nations, from which we sprung and with which all our interests are blended, awaken no ardor, no gratitude, no joy?

"Europe is free! Most transporting, most astonishing deliverance! How lately did we see her sitting in sackcloth and ashes; and now she is arrayed in the garments of praise and salvation. Instead of the deep and stifled groans of oppression, one general acclamation now bursts on us from all her tribes and tongues. It ascends from the Alps, the Pyrenees, the Apennines; it issues from the forests of the North; it is wafted to us on the milder winds of the South. In every language the joy-inspiring acclamation reaches our ears, *The oppressor is fallen, and the world is free.*"

As an expression of his convictions in regard to Napoleon, Channing adds: —

"The most conspicuous man in Europe and in the world was a despot, black with crimes, the dark features of whose character were not brightened by a gleam of virtue. . . . But one thing we know, — that God has mercifully interposed and broken the power of the oppressor. For this most gracious and wonderful deliverance let every heart thank, and every tongue praise, him. Most holy, most merciful God, thine was the work; thine be the glory! Who will not rejoice? Who will not catch and repeat the acclamation, which flies through so many regions, — *The oppressor is fallen, and the world is free?*"

This discourse by William Ellery Channing, delivered when he was a young man of thirty-four, met with a hearty response. At the close of the religious services the Hon. Christopher Gore, who had been Governor of Massachusetts and was then a member of the United States Senate, addressed the assembly, on "that atrocious military despotism which had now become subverted," and presented a series of resolutions which were unanimously adopted. This meeting was followed by public demonstrations, while in the evening there were fireworks, and (by a special resolve of the

Legislature) *the State House was illuminated.* According to the statement of that day, "a vast multitude united in the celebration."

The only purpose here is to show with what interest the affairs of Europe were watched, at that period of our history, on this side of the Atlantic; that the movements of Napoleon were closely observed, and a decided estimate formed of his character; and that a young man, through twenty years of a thoughtful student's life, could not but have gathered some lessons from events of such remarkable import.

WASHINGTON.

WHAT HE DID FOR HIS OWN TIME, AND THE AGES WHICH ARE TO FOLLOW.

PRECISELY a twelvemonth before young Emerson commenced his career, Washington's second term of office, as Chief Magistrate of the nation, was drawing to its close, and he gave to the country, as his parting benediction, his Farewell Address. For forty-five years he had passed his life amid the pressure of public cares, and he now looked forward with joy to the quiet of private life; wishing for the whole people the best blessing and guidance of that Almighty Ruler, who had so wonderfully led them on and crowned them with continued favors. He then, with paternal solicitude, gave them his closing counsels in words of such weighty wisdom and profound import as have not only stamped them with immortality, but rendered them, with each successive year, broader in their comprehensive meaning, and more precious in that spirit which must always make them sacred to every lover of his country.

That Address was received with universal favor. Every mind and heart was quickened and touched, while through its influence the whole nation seemed bound together more firmly than ever before. What had Washington not done for the benefit of his country? what privation had he not endured? what trial had he not suffered? As Commander-in-Chief of the Continental Forces, we see him surrounded by every possible difficulty; with an army to discipline, organize, create, — not composed of veteran troops, fully equipped and thoroughly drilled, but of farmers, mechanics, and citizens in every walk of life, who at the first sound of

alarm had instantly seized whatever weapon was within their reach and volunteered their services. The yeomanry rushed from surrounding provinces, not yet furnished with the requisites of war. Tents, food, clothing, and ammunition were yet to be supplied. Barrels of sand, marked as powder, were rolled within the lines to prevent the men from being utterly discouraged. And whom did these men propose to meet thus? The royal forces, who had enjoyed for long years every advantage of professional discipline, and who were abundantly supplied with the amplest stores which the British Empire could furnish; while the commanders of these powerful battalions had gained a life-long experience in important service upon foreign battle-fields. Who does not recall that terrible winter of unexampled destitution at Valley Forge, where the men had neither blankets, nor sufficient clothing, nor even shoes to their feet, their very foot-prints being marked with blood upon the frozen ground? Yet even then, in the darkest hours, Washington never lost heart. Through severest perils he not only held firmly by his own courage, but retained the respect, the confidence, and the love of his men. In one instance of disaster he exclaimed, "Though the enemy should succeed in obtaining possession of the whole Atlantic States, I would retreat behind the Alleghanies and bid them defiance there!" Such determination was inevitably to result in success and triumph.

At the close of the war Washington told the army that "it now only remained for the Commander-in-Chief to address himself for the last time to the armies of the United States, and to bid them an affectionate and long farewell!" He states that it is not necessary for him "to detail the hardships peculiarly incident to their past service, or to describe the distresses which, in several instances, have resulted from the extremes of hunger and nakedness, combined with the rigors of an inclement season; nor is it necessary to dwell upon the dark side of our past affairs." He then gladly turns to the spirit with which they triumphed over outward circumstances, and declares that "the unparalleled perseverance of

the armies of the United States, through almost every possible suffering and discouragement, for the space of eight long years, was little short of a standing miracle."

The Commander-in-Chief also formally resigned his commission to Congress. Offering his congratulations at the independence and sovereignty which had been achieved, he surrendered into their hands the trust which had been committed to him eight years before.

But one other event associated with this period placed him yet higher (if that were possible) in the estimation of the whole people. The country, overburdened by its enormous debt, was exhausted and bankrupt. Its currency had become so far depreciated as to be nearly worthless, and the soldiers had no prospect of receiving their dues. Under such aggravating circumstances they had naturally become exasperated. It was a moment not only of apprehension, but of great alarm. At this most critical period Washington, like himself, was equal to the trial. With a wisdom which never forsook him, he magnanimously placed himself between the nation and the army, firmly insisting upon measures of equity; and in doing justice to both parties, he reconciled all who were concerned, bringing peace and good-will to the entire country.

Thus Washington, throughout his previous career, had been the acknowledged centre of all. He was the magnetic force around which persons of every position instinctively rallied. Not simply as a military leader was he thus recognized, but also as a patriot, a diplomatist, and a statesman.

Hostilities had indeed ceased. The army had been disbanded, but a feeling of dissatisfaction and gloom hung over the land; public credit was gone, commerce was at a stand, trade was paralyzed, the resources of the country seemed to have become extinguished. Of the handful of States each had its own peculiarities, and none seemed willing to yield. In regard to government, it might almost be said there was none. If any measures were recommended, there was no power to enforce them. Under such circumstances the question constantly presented itself: "Is Liberty to be a blessing

or a curse?" The outside pressure from the war being over, it looked, at times, as if all would fall to pieces. There was a threatening aspect of anarchy. Washington writes: "It is the perpetual wish of my heart to bind all parts of the Union together in indissoluble bonds." "What a triumph," he continues, "for the advocates of despotism, to find that we are incapable of governing ourselves, and that systems founded on the basis of equal liberty are merely ideal and fallacious!" "Let us have," he adds, "a government by which our lives, liberties, and properties will be secured, or let us know the worst at once!" "I hoped," said Washington, as he turned his face to Mount Vernon, "to spend the remainder of my days in cultivating the affections of good men and in the practice of domestic virtues." But much as he desired rest and quietness, he could never be indifferent to the claims of his country. The period was one of extreme solicitude. The anxieties of war had given way to the yet greater anxieties of peace. The several States were swayed by local interests, and distracted by party jealousies. Public affairs were fast drawing to a crisis. "Would to God," wrote Washington, "that wise measures may be taken in time to avert the consequences we have but too much reason to apprehend." "Thirteen sovereignties," he writes, "pulling against each other, and all tugging at the federal head, will soon bring ruin on the whole!" Thus did he continue to write and converse until his influence in this direction became more and more widely felt.

During this season of distrust and agitation the country never lost its confidence in Washington. He seemed the one vital power which bound together the whole. If the people could feel that *their* hand was in *his* hand, they were willing to be led. During this time he lost no opportunity, by correspondence or consultation, of urging the subject upon the minds of his countrymen, until, at length, a somewhat informal consideration of the question took place at Annapolis, which, after more extended sanction, led to a convention of deputies from all the States, convened at Philadelphia. The necessity for action would admit of no further delay. There

was in the country no executive head, no judiciary, no organized department of foreign affairs, and no department of interior administration. Congress was composed of but a single House, and could not administer its own laws. Thus the most ordinary obligations of government could not be fulfilled. Everything was radically defective. What had answered the purposes of the past could answer no longer. Yet there was an evident want of harmony, an antagonism of purpose; every shade of feeling existed, and every variety of opinion. Many there were, who had their supporters and friends, gifted and able, ready to make every sacrifice, — men of immense intellectual resources and consummate genius, — and yet it was true what Thomas Jefferson wrote to Washington, "The confidence of the whole Union is centred in *you*." And John Adams, when Vice-President, said officially in the presence of the Senate, "Were I blessed with powers to do justice to the character of Washington, it would be impossible to increase the confidence or affection of his country, or make the smallest addition to his glory!" All the more to the credit of the people was the faith they cherished when we recall the unquestionable excellence of the man. What Jefferson had said was the instinctive conviction of all: "His integrity was the most pure, his justice the most inflexible, I have ever known."

With this prevailing feeling in the public mind, when the Convention came together and Washington was chosen its presiding officer, all painful apprehension was removed, and confidence established. To form a consolidated government which should bind together thirteen independent republics, in which each should be reasonably free, yet firmly united, and in which might live a people self-governed with every reasonable hope of continued peace and prosperity; where order, security, and freedom might be firmly established, and among foreign nations the country be universally recognized as one of the leading powers of the world; — to accomplish a work like this, required a remarkable combination of qualities, — calm judgment, clear foresight, practical sense, and comprehensive wisdom. All these traits were more or less exem-

plified throughout the deliberations by as able a body of men as perhaps this country has ever seen brought together. The session continued for four months, and the members were in deliberation from five to seven hours each day. Thomas Jefferson was at that time Ambassador in France, and John Adams in England; but Benjamin Franklin was there, over eighty years of age, and James Madison, and Gouverneur Morris, and John Jay, and many of the ablest men that could be found in the country.

Their work did not consist in the transplanting of foreign codes, and lifting over the sea of petrified forms and customs, brought into use in a past age and under a different order of things. With due reverence for the past, it accepted what was wisest and best, honoring what had borne the test of time and received the sanction of ages, yet blending all with harmonious adaptations to the fresh wants of a new time. Thus was it in many respects like a creation, adapted to an untried order of things. By it a confederacy was exchanged for a government, and a circle of individual states became a nationality. During this eventful labor the presence and approval of Washington was as important as all other things combined, to strengthen and confirm the popular will. For this, as much as for any one thing, do we owe Washington lasting gratitude.

The Constitution of the United States was duly signed by members of the Convention, and sent to the existing Congress, by whom it was forwarded to the several States, with the request that State conventions of the people should be appointed for further deliberation, and that when a sufficient number of States should signify their approval and acceptance, the Constitution should be adopted as the supreme law of the land. These delegates, chosen by the people for the express purpose of considering every principle in the proposed Constitution, thoroughly fulfilled their work, after which each State convention transmitted to Congress testimonials of the result at which they had arrived. And the requisite number having fully testified their acceptance, in 1788, with the amendments which had been adopted, it

became the acknowledged Constitution of the United States, under which, at this moment, more than fifty millions of people are enjoying the privileges of prosperity and freedom. Many of the ablest minds in the country gave their best ability to the perfecting of this work. Ample honor to each one to whom gratitude is due, but no stinted tribute to him to whom we all owe more than can be expressed!

An important provision of the Constitution was the creation of an entirely new office of great responsibility. To this office, as Chief Magistrate of the nation, was elected George Washington. There was but one mind. No hesitation or difference of opinion existed. He was the man who united every heart, and who was chosen by acclamation. With reluctance, personally, he accepted the position. He was called to administer a new form of government under entirely new circumstances; to make direct application of principles for the first time. All the various departments of government were to be organized and put in action. One of Washington's great faculties consisted in selecting the right men for the right place, and in closely uniting with himself the ablest minds in the country. He had said that he could but promise "integrity, firmness, and an honest zeal." These he brought, and much more. Through unending responsibilities and conflicting opinions he held his persistent course, ever faithful in the minutest particular, unswayed by prejudice, unwavering in the cause of right, with a broad comprehensiveness and unfailing wisdom.

At the earnest solicitation of the people, Washington was persuaded to stand for a second term of the Presidency; making, at the close of his official service, an administration of eight laborious years, full of solicitude and care, but laden with every possible advantage to the country.

This immediately preceded the life of George B. Emerson. It helped to create the time into which he entered. That period was not only the precursor, but the providential season of preparation for all which followed. The immortal words of Washington's Farewell Address were yet warm in the air.

On the last month of the eighteenth century (December, 1799), after a brief illness, Washington's earthly existence ended. Throughout this country the sorrow was profound, as had been the reverence and love which preceded it. It seemed like the bereavement of children at the loss of an honored parent. The grief was universal and overpowering; while all that was noble in that remarkable character, which through fifty exciting years had held the attention of the people, now seemed more exalted and inspiring than ever before. Not only in our own Republic, but through distant lands, was this event recognized.

Napoleon had just returned from Egypt, bringing with him monuments of ancient art, as the trophies of his battles. These spoils of war were unveiled with splendid ceremonies in the Champ de Mars. Napoleon, as First Consul, issued the following order to the army: "Washington is dead. This great man fought against tyranny. He established the liberty of his country. His memory will always be dear to the French people, as it will be to all free men of the two worlds." It was likewise ordered that black crape should be suspended, for ten days, upon all standards and flags throughout the Republic; also, that a funeral oration be delivered in honor of Washington. This service took place in the Hôtel des Invalides, at which the First Consul and all the civil and military authorities were present.

At the same time the commander of the British fleet ordered his flag at half-mast, in which the whole squadron, numbering sixty ships of the line, united. Such are but indications of that public respect which was manifested on every side. Rufus King, the American Minister in London, wrote "No one who has not been in England can have a just idea of the admiration expressed among all parties for General Washington." Charles James Fox declared that "such a character is hardly to be found upon the pages of history." From every quarter of the globe came back expressions of sympathy and sorrow. While this country, for which he had faithfully labored, realized, even more deeply than during his life, how much the whole people were under obligation to

him, and that the debt of gratitude, now due to him, would only accumulate through coming time. Death always gives to what is done, and well done, an added sanctity; and it was peculiarly so here. The war for independence had been fought and won; a confederacy had given place to a nationality; a constitution had been considered, discussed, and accepted. Two terms of the Presidency by the great leader had been fully and successfully rounded and brought to a fitting close; and now, as the result of all, we had a Republic, not in disjointed fragments, but firmly established on solid foundations, a perfect whole.

Over all this history could be traced a guiding Hand and a providential care. At a time so momentous the career of George B. Emerson commenced. The impressiveness of the period continued for years to surround him. Many of the great minds that had worked with Washington, were, in his day, yet living, — Thomas Jefferson and John Adams, James Madison, Rufus King, Alexander Hamilton, John Jay, and many more, — all master minds, and some, even into advanced age, still able to give encouragement and counsel. Mr. Emerson's younger days were in the midst of these influences. He heard with intense earnestness the statements of those who had been personally acquainted with Washington, as they recounted their trials and hardships in the camp, and their struggles on the field of battle; how they were with Washington when he turned back the tide of defeat at Monmouth, and when he suddenly broke in upon the enemy's forces on the Delaware; how, wherever he was, he showed intrepidity, skill, patience, and, under every circumstance, unflinching courage. While he eagerly listened, more and more sacred became the associations connected with that wonderful life. As years passed on, a feeling of religious fervor gathered about the recollections of that time, while, as his faculties expanded, he studied, with ever-increasing enthusiasm, the grandeur of a character so closely identified with his country's history.

It is related of Washington Irving that while he was yet a child, his nurse, in the city of New York, took him out

for a walk, and that, meeting General Washington, she approached him, saying, "May it please your Honor, this child was named for you." The General paused, laid his hand upon the child's head, and gave him his blessing. "The gentle pressure of that hand," writes William C. Bryant, "Irving always remembered; and that blessing, Irving believed, attended him through life." "Who shall say," he adds, "what power that recollection may have had in keeping him true to high and generous aims?"

There is no tradition that Washington actually laid his hand upon the head of George B. Emerson, but it is perhaps not claiming too much to affirm that his *blessing* did rest there. Who could contemplate such a character and not feel quickened and inspired by its influence? The principles which, abstractly considered, he most liked, he found embodied in Washington, as a living whole, — calmness and resolution, prudence and fortitude, modesty blended with self-reliance, courage that could face every danger, with a perseverance before which hardships and privations melted away; while, in that remarkable man, these characteristics were blended with a pervading and all-controlling wisdom, and subordinated to the noblest qualities, — love of country, fidelity to conscience, manly integrity, devotion to duty, and, under every circumstance, the recognition of a Power higher than this world, a divine Arbiter who overrules all human events.

Such was the character which, alike in war and in peace, won the love and the confidence of the whole people. It was this which drew so many towards itself with magnetic power, and which, through all changes, secured the truest welfare of the nation; and only by the dissemination of such qualities can the best welfare of the nation be perpetuated. Thus was it that Washington became a world-wide benefactor; and the nearer his countrymen shall follow him, the more truly will *they* become benefactors also. By this has he left a name to remain untarnished to the end of time; and thus alone can *we* possess a character which may bear the severest scrutiny, and stand the test both of this life and of the life to come.

All that had thus far been accomplished, was but the introduction to what must follow. The wide recognition of popular rights implied corresponding responsibilities and duties. By the neglect of such duties on the part of the people may be brought about "the ruin" (such were the words of Washington), "the *ruin* of the goodly fabric we have been erecting; and thus the fairest prospect of happiness and prosperity that ever was presented to man will be lost, — perhaps forever."

"I am persuaded," continues Washington, "that you will agree with me in opinion, that there is nothing which can better deserve your patronage than the promotion of science and literature. Knowledge is, in every country, the surest basis of public happiness. In a country in which the measures of government receive their impression so immediately from the sense of the community as in ours, it is proportionably essential; to the security of a free constitution it contributes in various ways, by convincing those who are intrusted with the public administration that every valuable end of government is best answered by the enlightened confidence of the people, and by teaching the people themselves to know and to value their own rights."

In view of that possible future rising before his own contemplation, he writes: "It is universally acknowledged that the enlarged prospects of happiness, opened by the confirmation of our independence and sovereignty, almost exceed the power of description." "Heaven" he adds, "has crowned all its other blessings by giving a surer opportunity for political happiness than any other nation has ever been favored with." But then the proportional responsibilities are recognized, and the only true basis of lasting welfare. "There is no truth more thoroughly established" (this is his language) "than that there exists in the economy and course of nature an indissoluble union between virtue and happiness, between duty and advantage, between the genuine maxims of an honest and magnanimous policy and the solid rewards of public prosperity and felicity." "The propitious smiles of Heaven," he continues, "can never be expected on

a nation that disregards those eternal rules of order and right which Heaven itself has ordained." And the consequences of our neglect or fidelity, not only to ourselves and to coming generations here, but to the whole world, he thus emphatically pronounces: "The preservation of the sacred fire of liberty, and the destiny of the republican model of government, are justly considered as deeply, perhaps as finally, staked on the experiment intrusted to the hands of the American people."

The happy conjuncture of times and circumstances under which this Republic assumed its rank among the nations is thus forcibly presented by Washington in the Circular Letter which he addressed to the Governors of the several States in 1783: "The foundation of our empire was not laid in a gloomy age of ignorance and superstition, but at an epoch when the rights of mankind were better understood, and more clearly defined than at any former period; researches of the human mind after social happiness have been carried to a great extent; the treasures of knowledge, acquired by the labors of philosophers, sages, and legislators through a long succession of years, are laid open for us, and their collected wisdom may be happily applied in the establishment of our forms of government; the free cultivation of letters, the unbounded extension of commerce, the progressive refinement of manners, the growing liberality of sentiment, and, above all, the pure and benign light of revelation, have had a meliorating influence on mankind, and increased the blessings of society." And then, pausing, he adds: "At this auspicious period the United States came into existence as a nation; and if their citizens should not be completely free and happy, the fault will be entirely their own."

Washington was too true to himself and his country not to mingle with his congratulations admonitions and warnings. "Such," he said, "is our situation, and such are our prospects. But, notwithstanding the cup of blessing is thus reached out to us, if we have the disposition to make it our own; yet it appears to me, there is an option still left to the United States of America, whether they will be respectable

and prosperous, or contemptible and miserable as a nation." Privileges, with him, implied duties. All that the patriots of the Revolution had done, all that the fathers of the Republic had written, must bequeath to their successors corresponding responsibilities. But blessed will those be who prove true and faithful. "Happy" (such were Washington's words), "thrice happy shall they be pronounced hereafter, who have contributed anything, who have performed the meanest office, in erecting this stupendous fabric of freedom and empire, on the broad basis of independency; who have assisted in protecting the rights of human nature, and establishing an asylum for the poor and oppressed of all nations."

The scholar earnestly responded. A patriotism was kindled in his heart which never became extinguished. All the finer instincts of his nature moved in unison. His ideas of duty and of right pointed in one direction. What did such a government as this presuppose, if not intelligence, improvement, progress? Here was a new condition of civil society, an advanced form of social organization. Was it intended for a stupid and stolid, a mean and mercenary people? or did it imply growth and expansion, — the developing of resources, not simply in connection with material wealth, but of intellectual capabilities, of whatever affected human thought and feeling, or touched the inmost springs of character? More and more deeply did he feel that our institutions, civil, moral, and religious, are based upon intelligence. His readings of the past, his hopes of the future, strengthened his conviction that to render men properly capable of self-government, implies culture, the power of thought, the development of the nobler faculties. There is a susceptibility of goodness which may be brought into action if properly appealed to; there are capacities only waiting the right moment to unfold; truths to be investigated, and duties to be performed; but the mind requires a true impulse and a right direction. Mr. Emerson resolved to devote his whole life to the education of the people; to aid in the right development of their intellectual and moral

life; as far as might be in his power, to disseminate that intelligence which is absolutely essential to the well-being of a republic; and thus, to the very extent of his ability, to lay a worthy foundation for whatever would most truly promote the highest welfare of his country.

GROWTH OF THE COUNTRY.

THE growth of the country during Mr. Emerson's lifetime is worthy of special notice.

The thirteen original States were all east of the Alleghany Mountains. Nowhere, as British colonies, did they reach into the interior more than one hundred miles from the Atlantic. Beyond that was a wilderness, peopled almost wholly by savage tribes.

The French insisted that the entire region was theirs. French and English alike put in their conflicting claims; while the former were taking decided steps to secure and sustain their position. They were drawing their lines more and more closely, until their movements were too palpable to be passed over in silence, and the manifest encroachment could not continue to be wholly overlooked.

Only about forty years before Mr. Emerson's birth, Washington had been commissioned to penetrate into that region where the French were attempting to build a succession of forts which should form a line of military posts to connect Louisiana with Canada. He was to remonstrate against this measure; and his instructions were to make himself acquainted with the character of the country. This journey to the Ohio was a laborious effort of three months, through unhewn forests, occupied by hostile Indian tribes. The French declared that Father Marquette had passed down the Mississippi in a canoe, while La Salle, in his wanderings, had seen the Ohio and Illinois, and that this gave to their country a title to all the lands between the Alleghany and the Rocky Mountains; on the other hand, the Indians claimed that, as the native occupants, the soil by right belonged to them. "It is

ours," they said, "and you wish to steal it from us." This contest was the commencement of that struggle which finally ended in the independence of the United Colonies. Washington's commission was to proceed to the Ohio River, convene there the Indian chiefs, and secure an escort of warriors to be his guides through the rest of his journey. It was altogether a perilous enterprise. But our principal purpose now is to speak of the wild and unsubdued character of the country. With their horses they were obliged to swim the rivers; or cross, as they best might, upon rude rafts. The tangled forests were almost impenetrable, and nowhere was the first sign of cultivation to be seen.

A few years passed by, and, with the establishment of the Republic on the basis of freedom, the progress of civilization took a fresh start. The tide of population moved ceaselessly onward, and with that population, industry, culture, together with all the multiplied fruits of enterprise and skill. In due time the fertile region bordering the waters of the Monongahela and the Ohio became an important part of the Union; and presently, by rapid expansion, the whole rich valley of the Mississippi, larger in itself than many of the empires of Europe, was included; comprising an area of 2,455,000 square miles, and extending through at least thirty degrees of longitude, — a realm which De Tocqueville declares to be "the most magnificent dwelling-place prepared by God for man's abode," and of which Benjamin Franklin, with prophetic foresight, pronounced, "In less than a century it must undoubtedly become a populous and powerful dominion."

Exactly ten years before Mr. Emerson's birth, the great Ordinance for the Government of the Northwestern Territory was passed (1787), which included all the region northwest of the Ohio. This was wholly, at that time, an unreclaimed wilderness. By this Ordinance the entire territory was irrevocably dedicated to free labor. Out of this region were formed the five great States of Ohio, Indiana, Illinois, Michigan, and Wisconsin. Mr. Emerson witnessed the result of this wise act of statesmanship, in the unparalleled growth and prosperity which followed. Within his day those States had an industri-

ous, intelligent, and thrifty population of over seven millions. And if we include Iowa, Minnesota, Missouri, and Kansas, we have a population of over twelve millions, with a fertility of soil which yields annually an amount of agricultural products absolutely amazing, together with a network of railroads which brings a market everywhere closely at hand. The State of Ohio covers an area of 40,000 square miles; Indiana, 33,809; Illinois, 55,405; Michigan, 56,243; Wisconsin, 53,924; Iowa, 55,045; Minnesota, 83,530; Missouri, 67,380; and Kansas, 83,000.

As a proof of Mr. Emerson's interest in this new region, and the growth and extension of the country, the very year following the completion of the Pacific and Union Railroad, in his seventy-third year, he went over the whole road to the shores of the Pacific. He thus travelled 367 miles through Iowa, 473 through Nebraska, 487 through Wyoming, 221 through Utah, 455 through Nevada, and about 300 through California.

When he was forty years of age, the first house had not been built in San Francisco; when he arrived there, he found 140,000 inhabitants, and an area of over 30,000 acres, covered with churches, schools, and colleges; scientific and literary institutions, hotels and hospitals, libraries and reading-rooms, markets and manufactories, with extensive public grounds and parks. The assessed valuation of property was about $100,000,000. There were from seventeen to eighteen thousand buildings, many of which were spacious and elegant. More than a thousand edifices had been erected within the preceding year. The United States Mint has an important branch in this city, where the gold and silver from the mines is turned out as coin. This was established in 1854. When Mr. Emerson was there, it had coined $240,000,000. Bags and packages of gold dust, from thousands of miners, are scattered round. Packages of bullion are sent on deposit; and here are the crucibles in which the precious metals are melted, and from which they are ladled out, while the shining coins fresh from the stamp, are weighed and sorted;—only now waiting to be scattered through the community.

Richard H. Dana, Jr., visited the Pacific coast in the ship "Alert" (1835–36). At that time, in his "Two Years before the Mast," he speaks of entering "the *vast solitude* of the Bay of San Francisco," while of the shore he says, it is a lonely and sandy plain without a dwelling. During the whole time of their stay not a sail came or went; and only one vessel, a Russian, lay there at anchor. Now, connected with the populous city are extensive and unsurpassed accommodations for shipping; while between two and three thousand vessels arrive from foreign lands within the year; and ships are constantly sailing, with their various freightage, to every part of the world; the grain shipments alone amounting to over $13,000,000 annually.

But with all this wonderful development, few things could impress Mr. Emerson more than the extraordinary aspects of nature; with his love for flowers and plants, how could he but be impressed by the tropical fertility so profusely displayed? The earth everywhere seemed but sand; yet all it needed was water to cause it to burst forth into forms of consummate luxuriance and beauty. The fruits were large and luscious, the flowers numberless and superb. The fuchsias expanded beyond reach; the heliotrope became a lofty shrub; the rose, of colossal size, looked in at the upper windows; delicate vines, gorgeous with blossoms, veiled the houses; geraniums of deepest scarlet, kindled like a flame, forming screens and hedges. The size, the richness, the profusion, seemed fabulous. With ample irrigation all things appeared possible; the very sand became prolific of splendor. Not for a brief season, but, thus cared for, through the whole year, they grow and blossom. Then the trees — the madrona, the manzanita, and a thousand others — were so strangely beautiful. But we must not dwell upon the fascinating aspects of this Pacific coast, extending its seven hundred miles along the ocean, and its two hundred miles of width, with its two ranges of noble mountains, its marvellous forests, and its untold treasures of mineral and agricultural wealth.

North of California are Oregon and Washington Territory, with Montana and Idaho, a country which, in Mr.

Emerson's boyhood, was inhabited wholly by Indian tribes, with their uncertain and roving life. He lived to see this entire region become an important part of the Union. It shows what rapid strides were taken within the limits of a single lifetime.

In 1787, exactly ten years before Mr. Emerson's birth, at a mansion in Bowdoin Square, Boston, within a stone's throw of the spot where Mr. Emerson for many years successfully taught school, were several gentlemen, among whom was Dr. Bulfinch, father of Thomas Bulfinch, Mr. Emerson's most intimate friend. The conversation turned upon the recent voyages and discoveries of Captain Cook, and upon John Ledyard, who was a native of New England, and whose first boat adventure was on the Connecticut River. Remarks were made upon Captain Cook's statement respecting the valuable furs to be obtained from the Indians in exchange for trifling commodities. "A rich harvest there," they exclaimed, "for those who shall have the spirit to secure it!" This led soon after to practical results. An expedition was arranged, and two vessels were properly equipped for that long voyage round Cape Horn and along the Northwest coast. One vessel was named the "Columbia," and was commanded by Captain Robert Gray. From this voyage there was a safe return, and in 1790 the same vessel and captain left Boston for a second adventure. On this voyage they had the good fortune to discover a harbor far up the coast, to which was given the name of Bulfinch Harbor, and another which they called Gray's Harbor; and a great river, by far the most important upon the whole Pacific coast, the immense value of which, even to this day, may not be fully estimated. Captain Gray with his good ship entered the mouth of this river, all sails set, going up some twenty miles, trading with the natives and filling his casks with fresh water. To this river he gave the name of his ship, the "Columbia," the name by which it is now known over the whole world. This discovery, together with other facts, established the claim of the United States to that part of the continent. A large number of vessels, especially from Boston, carried on

from that date a constant traffic with this coast. While Thomas Jefferson was Minister from the United States at the Court of France, he often met John Ledyard, and listened to the accounts of his experiences with Captain Cook along the Northwest coast. Mr. Jefferson became deeply impressed, through the information imparted, with the importance of that region to this country. When he became President he brought the subject before Congress, and gained the appointment of an overland expedition, which embraced the ascent of the Missouri and the descent of the Columbia to the shore of the Pacific. This was proposed to Congress in 1803, and in 1804 the explorers commenced their route. A most interesting account of their whole journey was published. They demonstrated the feasibility of a direct communication from the Atlantic to the Pacific, and showed conclusively that what had been pronounced as a hopeless desert might to a great degree, by proper cultivation, be made to wave with corn, barley, and wheat; while much that seemed desolate was rich in mineral wealth. The Columbia River alone was found to drain a basin of four hundred thousand square miles. It may readily be used by large vessels through three hundred miles, and is navigable for barques and barges over seven hundred miles.

The first American settlement on the Columbia was on the south side, about eight miles from its mouth. It bore the name of Astoria, after John Jacob Astor, of New York, who was interested in the fur trade. His purpose was to establish a line of trading-posts, Astoria forming the central mart. Furs obtained here from the natives were to be exchanged for valuable commodities at Canton, which were destined, in their turn, for the Atlantic States. It was a great enterprise. Mr. Astor offered, if protected by the Government, to turn the whole of this trade into American channels. Mr. Jefferson, in a letter to Mr. Astor, writes: "I consider the commencement of a settlement on that point of the western coast of America, as a great acquisition, and look forward with gratification to the time when the descendants of those who now become established there, shall have spread themselves through the whole length of that coast." The history of this

enterprise reads like a romance, and has been depicted with graphic power by Washington Irving. Controversies extended through many years respecting the boundary line between us and the British Territories; but Mr. Emerson lived to see the forty-ninth parallel of north latitude declared by treaty to be the true northern boundary of the United States, running upon this parallel to the middle of the channel which separates the continent from Vancouver's Island. Then followed a difference of opinion as to exactly where was the middle of the channel into the Pacific, a subject of actual importance, including a breadth of fifty miles, and a length of sixty miles before reaching the ocean; covering a space of 3,000 square miles, and numbering no less than forty islands. The final decision upon this question was mutually referred, May 8, 1871, to his Majesty, the Emperor of Germany, from whose decision there was to be no appeal. And on the 21st of October, 1872, after thorough examination, the Imperial great seal, with the Emperor's autograph, was placed upon parchment at Berlin; and the Haro Channel (the same for which the Government of the United States had contended) was fixed upon as the true line.

Since this decision, conflicting views have ceased, and harmony prevails; while Oregon and Washington Territory, together with Idaho and Montana, have become an acknowledged part of the Republic. Washington Territory measures 250 miles by 360, making an area of 70,000 square miles, with a population of 110,000; Oregon, 275 miles by 350, making an area of 95,274 square miles, with a population of 225,000; while in both are schools and academies and colleges, and an earnest determination to place within the reach of all the privileges of a good education. Idaho has an area of 99,932 square miles, with immense mineral wealth. Gold abounds; over thirty quartz mills are in operation, and in 1868 it had sent $14,000,000 in gold to the United States Mint. Montana has an area of 143,776 square miles, and has the honor of including within itself the source of both the Missouri and the Columbia Rivers, — one flowing west and the other east, thus uniting the Atlantic and the Pacific. It has a population of over 60,000. While its valleys are fertile,

its hills teem with mineral wealth. The product of its gold mines is authoritatively reported as amounting to $20,000,000 per year. Silver, coal, lead, copper, are also found in great profusion. It has a thoroughly good school system, and a superintendent of public instruction.

All this region, once so distant, has been brought as to our very door by the Northern Pacific Railroad. This great line of continental intercommunication properly commences at St. Paul. The East has various lines reaching thus far. Now from thence, by its main line and branches, the Northern Pacific operates over three thousand miles, putting its connected belt of road across the American continent and only stopping with the Pacific Ocean.

St. Paul itself, at the head of steamboat navigation on the Mississippi, is two thousand miles from its mouth, and stands midway between the two oceans. Thirty-four years ago this now flourishing city had not so much as a name upon the map. In 1881 it did a wholesale business of $51,000,000.

Not long since, from thence to the mouth of the Columbia would have been a most tedious and dangerous journey, through the midst of savage Indian tribes, with no footpath marked out by man, with no asylum for safety and no roof for shelter; day after day, and week after week, through what might have seemed interminable forests and drifting sands and precipitous rocks. Now, incredible as it may seem, one can pass across the whole continent in a Pullman palace car, with as much comfort and luxury as if he were seated in the Brunswick or the Fifth Avenue Hotel; and, arriving at the mouth of the Columbia, may send a message by telegraph which shall reach the friends at home in a few moments, telling of his safe arrival, to which he may add, if he pleases, the latest news from Alaska and Japan!

It was the declaration of Edmund Burke, in the British Parliament in 1775, in speaking of the unprecedented growth of the colonies, even up to that date: "Your children do not grow faster from infancy to manhood than they [of the colonies] spread from families to communities and from villages to nations." What would he have said, could he have witnessed the growth of the succeeding century?

Yet did he distinctly perceive the principles at work, and had a most vivid consciousness of the coming result. Washington in his Inaugural Address spoke of the overruling Power which throughout its past career had led this nation on, a guidance which he recognized in all the events of his life. "No people" (such were his words), — "no people can be bound to acknowledge and adore the invisible Hand which conducts the affairs of men, more than the people of the United States." These words, uttered in 1789, are equally true to-day. The same Hand continues to lead, and the same Providence to bless.

Let us take a General Survey of the rapid growth and increasing prosperity of this country during Mr. Emerson's lifetime, — that is, from 1797 to 1881.

In his youth the area of Territory in the United States was 1,000,000 square miles; in 1881 there were 3,602,990 square miles, — making, within his memory, *an actual increase of* 2,602,990 *square miles.*

When he was first counted as one of the Population of the United States, there were five millions of people; before his death the number had increased to fifty-one millions, — making, within his experience, *an increase of forty-six millions.*

In the way of Manufactures, in 1800 (when Emerson was three years of age), the manufactured products of the United States were valued at fifty million dollars; in 1880 (when he was in his eighty-third year), he had seen *an increase of about six billion dollars.*

In addition to this increase in manufactured fabrics of six billions, there was a valuation of *Agricultural products of over two billion dollars.*

The Export of domestic products in 1800 was forty millions; and in 1881 *it had risen to nearly nine hundred millions.* All will readily admit that this is a most remarkable increase in the territory, population, manufactures, agricultural products and exportations of one country within the circle of a single life.

RAILROADS.

THROUGH Mr. Emerson's youthful days the present marvellous means of intercommunication, by which distant sections of the country and of the world are now brought together, had no existence. What would have then been the fatiguing journey of a week, can now, as we all know, be readily accomplished with perfect ease in a few hours. The changes thus produced, socially and commercially, are almost beyond comprehension.

When Mr. Emerson was twenty years of age, not one railroad existed throughout all Europe. Now into what part of Europe can we look and not find railroads? Various rude experiments had indeed been made at a somewhat earlier date, principally for the transit of coal, in Durham and Northumberland. Upon this basis various improvements were introduced, which at length resulted in a railroad, properly so called. The earliest of these roads was formally opened between Liverpool and Manchester in 1830. This may be counted the true inauguration of the great railway system, at which time Mr. Emerson was thirty-three years of age. Within twenty years, in Great Britain alone, more than five hundred million dollars had been thus invested. The first railroads out of Great Britain were commenced in Belgium; after this they were introduced into France, Italy, Denmark, Sweden, Norway, Switzerland, and now exist on an extended scale in Spain, Russia, India, China, Africa, until in fact they form a network over the whole globe.

Mr. Emerson distinctly remembered the first introduction of these roads into this country. In 1830 he saw the earliest railroad on this continent, about twenty miles in length, which was looked upon as a curiosity. The rapid increase

of railroads in the United States may be seen by the following statement, giving the number of miles in operation through each successive five years, from 1835 to 1882: —

In 1830	the number	of	miles in operation	was 20
" 1835	"	"	"	1,098
" 1840	"	"	"	2,818
" 1845	"	"	"	4,633
" 1850	"	"	"	9,021
" 1855	"	"	"	18,374
" 1860	"	"	"	30,635
" 1865	"	"	"	35,085
" 1870	"	"	"	52,914
" 1875	"	"	"	74,096
" 1880	"	"	"	93,671 .
" 1881	"	"	"	104,813
" 1882	"	"	"	113,329

During the last ten years of Mr. Emerson's life over fifty thousand miles of railroad were built. That which was once considered a visionary scheme had become a practical method of transportation in, what may well be called, universal use. If the same rate of construction continues, there will be, in 1890, over two hundred thousand miles of road in this country in full operation, extending from the Gulf of St. Lawrence to the Gulf of Mexico, including three distinct lines uniting the Atlantic to the Pacific Ocean.

The earnings of the railroads in the country during the past year equalled $725,325,119, an increase over the previous year of $110,000,000. The net earnings of the roads were, $276,654,119, an increase of $21,500,000 over the earnings of 1880. The cost of operating the roads for the year was $449,565,071. The total amount expended in the construction of new lines, and in operating and improving old roads, was over $750,000,000; the greater part of this vast sum being paid in wages.

The number of persons employed in operating the roads was 1,200,000; the number employed in the construction of our railroads equalled 400,000, making the whole number 1,600,000.

The tonnage transported over all the roads in the country in 1881 was not less than 350,000,000,000 tons. The valuation of the tonnage moved on all the railroads of the United States was estimated at $12,000,000,000. As an evidence of the rapid progress of the railroad tonnage of the country, it may be stated that the tonnage of all the railroads in the United States in 1851 did not exceed 5,000,000 tons, an increase in thirty years of 349,995,000,000 tons. Thirty years ago the tonnage did not equal one half the present annual tonnage of the Erie and New York Central Railroad. The value of tonnage in 1851 did not exceed $250,000,000, while the tonnage in 1881 was $12,000,000,000. The total number of passengers transported during 1882 (not including the New York elevated railroads) was 289,190,723. The total movement of all the railroads, in 1882, equalled 6,834,048,765 persons. The total movement of all the railroads, in 1882, equalled 39,302,209,249 tons. The value of net tonnage was, say, $15,000,000,000.

These roads have made what was once distant near, and have caused a people scattered over remote spaces to become as one family. Indeed, in these latter days there seems no such thing as distance. Thackeray declares, "we no longer travel, *we only arrive*." The producer finds his market, though it were thousands of miles away, as if it were at his next door; and friends separated by zones and climates may almost pass their social evenings together. The results are more than financial. The material resources of the country by this instrumentality have been immeasurably developed; but beyond this are subtle influences, largely affecting mind and heart, which may, in the end, become a supreme good.

STEAM NAVIGATION.

MR. EMERSON was a lad ten years of age when Fulton launched his first steam vessel on the Hudson, and he might have been on board the boat, in company with Fulton, as he made that memorable voyage from New York to Albany, a distance of one hundred and forty-five miles against wind and tide, in twenty-four hours. Fulton, with indomitable will, through years of trial, had overcome one obstacle after another, until now the utility of this new method of navigation was fully demonstrated.

Within five years of that time Fulton built at Pittsburg the first steamer to ply upon the Mississippi. On being congratulated upon what he had accomplished on the Hudson, this illustrious inventor said to Judge Story: "My ultimate triumph will be on the Mississippi. I know that steamboat navigation on that river is deemed impossible by many; but I am confident of success." That prediction was fulfilled; and an entire change was thus wrought in the internal navigation of the country, extending speedily to all its navigable rivers and lakes. Mr. Emerson lived to see the old system of shipping completely revolutionized. Watching with habitual interest the application of science to the practical business of life, he counted this one of its most brilliant triumphs. Vessels propelled by steam were soon employed both by domestic and foreign commerce. The most distant countries of the world were brought into close connection. Even in the naval service old ships of the line were displaced by steamers, while unexampled facilities of intercommunication were offered on river and lake and ocean, for travel and traffic over the entire globe.

THE TELEGRAPH.

THE fellow-worker with the railroad is the electric telegraph. When Mr. Emerson was forty-seven years of age, the first line of electric telegraph on this continent was laid between Baltimore and Washington. This was under the superintendence of Professor Morse, who was six years Mr. Emerson's senior. Thirty years previous to this, Morse, with the intention of being a portrait painter, was an art student under Benjamin West. Mr. Emerson lived to see the name of Morse identified with the recording telegraph, under whose influence it extended itself over the whole globe.

Mr. Cornell was at the same time (1844), working with his wheel-barrow, as a day laborer, in the employment of Mr. Morse, to whom he imparted valuable suggestions, which by their adoption rendered the line more perfect. Mr. Cornell has, since that time, established the University that bears his name; and this is but one of his many munificent gifts for the benefit of his country.

The electric telegraph in this country, before Mr. Emerson's death, covered not less than fifty thousand miles. The number of messages passing annually over the wires was estimated at five million, from which a revenue was received of more than two million dollars per annum; while, in addition to this, the press paid at least two hundred thousand dollars for public despatches. But far beyond this is the present extension of the electric telegraph, stretching, as it now does, over the cities and villages of the whole continent, spanning its plains and climbing its mountains, it being now considered everywhere as an essential requisite in business,

commerce and traffic in all their branches having become more and more dependent upon it.

Thus did Mr. Emerson find it, when at the age of seventy-three he followed the electric wire from the Atlantic to the Pacific, — one thousand miles from Boston to Chicago; then from Chicago to Omaha, five hundred miles; thence over the inclined plain, five hundred miles more, to Cheyenne, at the foot of the Rocky Mountains; still upward to Sherman, eight thousand four hundred and twenty-four feet above the ocean. After this was Laramie, and Echo and Webber Cañon, and yet onward over the alkali plains, one thousand miles more. At times there were treeless deserts and plains of barren sand; at times, towering rocks worn into fantastic shapes by the storms of ages; and again, richest verdure and flowers. Now there were opening vistas stretching away far as the eye could reach; and now, elevations higher than St. Bernard, the loftiest inhabited spot in Europe.

During this whole journey, taken, as we have said, when Mr. Emerson was beyond his threescore years and ten, he found the iron thread at every point, bearing its messages with the swiftness of light along the valleys and over the highest summits of the mountains. Not yet had he reached his place of destination; still onward he passed, by the Humboldt River, and the mysterious gorge where the waters of that river vanish; then far away over the Sierra Nevada, and down the western slope to San Francisco; and not once over all this distance, from Plymouth Rock to the Golden Gate, had the continuity of the wire been broken. Well might he exclaim, with the Psalmist, "Their line is gone out through all the earth, and their words to the end of the world!"

The writer dwells with the greater pleasure upon Mr. Emerson's journey over the Central Pacific Railroad, because, in the spring of the same year (1870), it was his good fortune to pass over this road. Having in Europe participated with him in some of the rare advantages there offered, by a singular coincidence the year 1870 found us both in California.

This Central Pacific road is throughout a marvel of civil engineering. It has triumphed over difficulties which might

well have appeared impossible for human power to surmount. Even where the way was most level, wood and water and all essential materials had to be brought from great distances, while frequently there were trackless deserts and ragged mountains, deep gorges and stupendous cliffs. In places enormous ravines were spanned by intricate trestle-work. Elsewhere passages were drilled through solid rock. Some of these tunnels are two thousand feet in length, perforating one mass of granite. There are at least fifteen of these tunnels upon the line, covering in all more than six thousand feet. The track going west ascends twenty-five hundred feet in fifty miles, and descends six thousand feet in seventy-five miles. A million dollars was expended in powder for the purpose of blasting; in numerous places powder was found not to be sufficiently powerful, and glycerine was used. Over a million dollars more was expended in building a bridge three thousand feet in length. While the road was in process of construction, not fewer than twenty-five sawmills on the Sierra Nevadas were kept constantly at work, supplying six hundred and twenty-five thousand feet of timber daily, aided by the axes of a thousand men. Workmen were often suspended over the surface of perpendicular rocks, drilling and blasting a pathway for the road. In one locality, known as Cape Horn, the precipice sinks abruptly fifteen hundred feet, while the smooth surface of the rock rises upward five hundred feet. The wide-sweeping view from thence, if one is not too dizzy to look, is sublime. Here the road passes over a plateau once the bed of an ocean, and lifted to its present position by volcanic forces; and again it glides along plains of pulverized rock ground into the finest dust by preadamite glaciers; and here again it winds around monuments of unknown geological epochs, the authentic record of past ages yet waiting to be read. More than twenty thousand men were employed in separate sections, busy at their various work; some living in tents, others in the open air. Nine out of ten of these hardy men had done good service during the civil war, and, having successfully defended the Government in its hour of peril, they had become used to hardship and had

learned to like it; and they worked with the more energy when they saw, as they did, the flag of the Republic waving over them. After reaching the highest point of the road, on the Rocky Mountains, there is a vast plateau lifted from five to seven thousand feet above the sea, extending hundreds of miles; while from this elevation, as in the Andes, or the Caucasus in Central Asia, rise yet loftier ranges. Arriving at length at the Sierra Nevada, these mountains stand like a rim along the western part of the Great Basin, — the Great Basin being itself elevated, as has been just stated, — and along this rim rise yet higher gigantic ranges, some of whose summits tower upward from fourteen to fifteen thousand feet. No one can imagine the engineering skill required, or the amount of toil endured in the formation of this road, who has not witnessed the extraordinary character of the country through which it passes, — a region not long since known only to trappers and hordes of Indians, while at the present time palace-cars glide peacefully over it, and the comfortable traveller gazes out upon the wondrous scenery, surrounded by every luxury, beholding at his ease grandeur unsurpassed in either Switzerland or Norway. Even the casual observer becomes excited by some new marvel at every step, while the artist kindles into enthusiasm at unexpected manifestations of color or form, and the student of science constantly beholds fresh fields opening before him for exploration.

Along the whole distance, added to the solid masonry beneath, a slender wire, like a spider's thread, swings in the air above. Over the first, thunders the powerful locomotive, with its ponderous train; while along the latter, darts the invisible thought of man, with its messages of joy or woe.

The writer of this, in 1870, accompanied the Board of Trade from Boston to San Francisco, in the first Pullman palace-cars that went directly through from the Atlantic to the Pacific. It was in this respect an historical event. The Governors of the several States, as their respective territories were entered, came out to meet us and extend a welcome. Thus it was at Iowa and Nebraska and Colorado and

Wyoming and Nevada; while in reply the President of the Board, the Hon. Alexander H. Rice, happily responded.

We had a printing-press on board, and a paper was published each day, filled with spirited communications from various members of our party; so that we were always sure of the latest news, and kept well informed upon passing events. Buffaloes, antelopes, and prairie dogs came out occasionally to look at us; while roving Indians of various tribes gazed upon us with evident wonder.

Even while the road was in process of construction there was a printing-press by which three newspapers were printed daily. The workmen could not get on without their newspaper!

The electric telegraph was throughout a pleasant companion, bringing and taking messages. Word of our progress was thus sent to friends who had been left behind, and thus also did we hear from Boston, Portland, New York, Philadelphia, and Washington; and as we approached the western side of the continent, far up on the Sierra, welcome came to us, in anticipation, from San Francisco. We were thus surrounded as by a mysterious presence. Neither mountain height nor the solitude of the desert could shut us out from sympathy. Along the whole road, at nearly every station, voices spoke to us, and the very air seemed instinct with a cordial good-will.

This Central Pacific Railroad, to be always counted as one of the great enterprises of our time, was finished in 1869. The last blow of the hammer was struck in the spring of that year, and on the 10th of May the memorable event was publicly celebrated; some three thousand persons, including workmen, being present.

The road had been carried on both from the east and from the west, and the golden spike was driven where the two parties met. A prayer was offered, of thanksgiving and supplication, after which several brief addresses were made, with congratulations from the Governors of several States. In the commemorative services the telegraph took active part. Arrangements had been made by which all the telegraphs in the

land were connected. Messages were sent and received. The electric wires were twined around the spike and the hammer, and these wires communicated with the telegraph line, and were thence connected with a fifteen-inch Parrott gun at San Francisco; and with the last stroke of the hammer the cannon (eight hundred miles distant) was fired by the electric spark, at which signal all the bells in San Francisco and along the Pacific Coast sent forth a rejoicing peal. At the same signal, the bells in Washington, Philadelphia, New York, Boston, Cincinnati, and Chicago simultaneously joined in the jubilant notes. The event was national, and the telegraph enabled the people of the whole land to participate.

The weight of wire used for the telegraph between Omaha and San Francisco amounted to seven hundred thousand pounds. Some of the Indian tribes along the route looked upon the wire with awe, and considered it to be under the protection of the Great Spirit; while tribes that had not this superstition had to be watched by a force of cavalry sent out from the Government.

As an illustration of the rapid speed of transmission and the efficiency with which work may be accomplished, messages are often telegraphed and printed at the rate of two thousand six hundred words per hour. They are sent at the rate of fifty-eight words per minute, and by some instruments with much greater despatch. On the day of President Lincoln's funeral eighty-five thousand words were transmitted from Washington to New York during the day, more than fourteen thousand words per hour. On another occasion the Annual Message of the Governor of New York, containing five thousand words, was officially transmitted by telegraph and published entire in the city of New York within two hours of its delivery at the Capitol in Albany. The speech of the Queen at the opening of Parliament was printed and circulated in Paris and Berlin before her Majesty had left the House of Lords, every word of which, in addition to its transit overland, must have gone thirty miles under the waters of the English Channel.

The electro-chemical telegraph can transmit, through a distance of one thousand miles, intelligence at the rate of nineteen thousand five hundred words per hour, which would probably answer the requirement of most persons under ordinary circumstances.

For scientific purposes arrangements were made, some time since, by which direct connections were formed from the Observatory at Cambridge to the Pacific coast and back, making a direct circuit, in the entire distance, of seven thousand miles. There was to be no break, but the message was to report itself at the same point from which it was sent. It went over this entire space (of seven thousand miles), reporting itself, as above named, in seven-tenths of a second.

And now comes another marvel, by which messages may be sent at the same time and by the same wire in opposite directions; nay, not simply two communications, but four, can be sent over one wire at the same time, from New York to Chicago, a distance of one thousand miles, and to St. Louis, a distance of eleven hundred miles. These simultaneous transmissions have thus gone from New York to Washington at the rate of fifty-eight words per minute each way. Messages are often sent from London two thousand miles, in answer to which are received instantaneous replies.

The telegraph at the present time is familiarly used in India, Russia, Mexico, and Australia, in Egypt and China, and even in Siberia, — indeed, it may well be said, in every place where the intelligence of man has made itself known.

Every variety of method has also been tried, — experiments of all descriptions, improvements and inventions without number, many of them most ingenious and curious, but not in all cases available for practical working. Volumes have been written describing various methods proposed, many presenting in some particulars special advantages; yet, remarkable as many of these have been, and reflecting great credit upon the genius of those who have labored over them, still it is an undeniable fact that the telegraph systems most generally used, both here and in Europe, have been those which originated in this country. Prescott speaks of a convention

of deputies from the German states of Austria, Prussia, Bavaria, Würtemberg, and Saxony. The meeting took place at Vienna for the purpose of establishing a uniform telegraph system, and of selecting for that purpose the best. After the most thorough examination, each method having been put to the severest test, the convention decided that the Morse system was practically superior to all others; and this American system was unanimously adopted, even though one of their own number (Professor Steinheil) had invented a recording telegraph which seemed to approach very near to perfection; yet under such circumstances he had the magnanimity to advocate the American system, which he considered, for economy, speed, and correctness, preferable to all others.

THE ELECTRIC FIRE ALARM.

In connection with the telegraph, the fire alarm is too important to be passed over in silence. For more than thirty years it has fulfilled its appointed work, rendering in many cities invaluable service. In the elevated portion of the City Hall a watchman is stationed day and night. From this centre run forth signal circuits of wire to every section of the city. These are connected with signal-boxes, to which, in case of fire, citizens have ready access. Thence the watchman is immediately informed in what district, and section of the district, the fire is, and the next moment the alarm bells, in all the church-towers, not only peal out the signal, but in such manner that the whole fire department instantly know where to direct their steps; often before the hand is withdrawn which gives the alarm, the entire body of firemen are rushing at full speed towards the scene of destruction. All the hammers that smite upon the bells weigh from one hundred to two hundred pounds; these are made to rise and fall by electro-magnetic power. The promptness and efficiency of the whole is like magic. In one instant of time hundreds of thousands throughout the city know what is transpiring; while those who can render aid are swiftly seeking to do so. Whatever alarms for fire were given in the city through the last quarter of a century of Mr. Emerson's life, came over the electric wire; and among others the alarm for that disastrous conflagration which laid the most valuable part of the city of his habitation in ashes, and when so many of his dearest personal friends saw, within a few hours, their warehouses laid in ruins.

SUBMARINE TELEGRAPH.

WHEN Mr. Emerson was fifty-seven years of age, there was not an ocean cable in the world. He lived to see more than seventy thousand miles of cable crossing seas and oceans. Various experiments had been made of carrying the telegraphic wire beneath the water; and when this had been successfully accomplished, there followed the bolder adventures of ten, twenty, thirty, and one hundred miles, — first, the Hudson River, New York and Jersey City; then Dover and Calais, England and Holland, the Persian Gulf, — but when this could be done, why not the Atlantic? In August of 1857 that daring purpose was resolutely commenced. Two ships of war — one the "Niagara," the other the "Agamemnon;" one American, and one English — each with twelve hundred and fifty miles of cable carefully coiled on board, commenced their work. Trials came, and disappointments; but no such result as failure was for an instant admitted. Once the cable parted in two thousand fathoms of water, after more than three hundred miles of its length had been successfully laid; at the next trial, a fierce gale overtook them, threatening all with destruction. But in spite of difficulties the great work was triumphantly accomplished. In August, 1857, the work of paying out the cable commenced, and on the 16th of August, 1858, the following official despatch was received at Newfoundland: "The Directors of the Atlantic Telegraph Company, Great Britain, to the Directors in America. Europe and America are united by telegraph. 'Glory to God in the highest, on earth peace, good-will towards men.'" On the 17th of August the telegraph brought under the ocean the first message from the Queen, congratulating the President

upon the successful completion of this great international work, — a work in which she declared she had taken the greatest interest, and fervently expressing the hope that "the electric cable which now connects Great Britain with the United States may prove an additional link between the two nations, whose friendship is founded upon their common interest and mutual esteem. The Queen renews to the President her best wishes for the prosperity of the United States."

To which the President of the United States cordially replied, reciprocating the congratulations of her Majesty the Queen, on the success of the great national enterprise, accomplished by the science, skill, and indomitable energy of the two countries. "May the Atlantic Telegraph, under the blessing of Heaven, prove to be a bond of perpetual peace and friendship between the kindred nations, and an instrument designed by Divine Providence to diffuse religion, civilization, liberty, and law throughout the world."

The Lord Mayor of London sent to the city of New York his earnest congratulations, adding: "This is a triumph of science and energy over time and space, uniting more closely the bonds of peace and commercial prosperity; introducing an era in the world's history, pregnant with results beyond the conception of a finite mind."

Thus, for nearly quarter of a century did Mr. Emerson live to see the Atlantic telegraph in constant use, and to have become so much a matter of daily life as to have lost perhaps with many its novelty, and with that the sense of its marvellousness.

Not only does the submarine telegraph now pass under the Atlantic, but the Black and the Red Seas, the German Ocean, and the Mediterranean. It reaches beneath the waves to Sweden and Denmark, to Malta and Alexandria, to Tripoli and Algiers, to Bombay and Calcutta.

But in addition to this, we are now beholding a double and treble and quadruple transmission of messages, — at the same time, over the same wire; simultaneous transmissions either in the same direction or in opposite directions. And this astonishing result has grown into large practice within

the last few years. To many minds this may doubtless be incomprehensible!

Looking over the surface of vast oceans and feeling impressed by the wild sweeping surges, the whole world knows full well that messages are constantly passing with the swiftness of light through those watery depths. But do men fully comprehend all the marvels therewith involved? How tame are even the wildest of the Arabian stories, compared to the wonders that are witnessed every hour! There are those who would hardly think it worthy of comment, if a message were sent this day to London, and from London to Constantinople, and thence to Bagdad, and from Bagdad through British India, and at last under the Atlantic to Massachusetts, and still onward over the Rocky Mountains and the Sierra Nevada, to San Francisco.

In the daily papers of San Francisco, is reported the telegraphic news respecting the state of the markets abroad, together with the general intelligence from Europe, of facts which were actually transpiring only the day previous. This intelligence is published simultaneously in New York, Boston, and San Francisco; the papers in the three cities reporting the same words which come to each, three thousand miles beneath the sea, and to the latter city at least three thousand miles more overland. Omniscience and Omnipresence seem practically illustrated in the commonplace doings of our day.

THE TELEPHONE.

ANY person might naturally have imagined, in regard to the transmission of thought through great distances of space, that perfection had been acquired, at least as near perfection as human ability would be likely to attain. But no; the climax had not yet been reached. An observer of poetic temperament might have exclaimed, "Ay, could we but send over the wires articulate speech! were it made possible for friends, a hundred miles distant, to converse together as if in the same room, that were indeed an achievement!" Well, even this has been accomplished. Not as a solitary experiment, but as a fact of daily experience, a simple business arrangement employed now by hundreds of thousands. At this moment more than three hundred thousand telephones are in constant and practical use through the United States. They are also in daily use through Belgium, Germany, Austria, Italy, Spain, Portugal, Russia, Sweden, Norway, and Holland. Over the civilized world they seem to have taken their place as one of the necessities of life.

In Mr. Emerson's advanced age Professor Alexander Graham Bell had acquired a high reputation as an educator; especially was he known as a successful teacher of deaf mutes. Not satisfied with mechanical methods or attainments yet reached, he examined closely the principles of speech and the philosophy of sound; the complicated organs of the throat, mouth, and ear, how they were constructed and why they were thus constructed. So accurate were his perceptions and so correct were his conclusions, that he actually taught those who had been born deaf and dumb to comprehend by the moving lips the thought expressed, and not only this, but to answer

by articulate speech. He also examined minutely into the philosophy of sound, the nature of vibrations made upon the atmosphere, the "how and why" connected with every movement, until, while watching the musical tones upon the cord of a piano, he suddenly exclaimed that the human voice might be transmitted over the electric wire. This was more than six years before Mr. Emerson's death, who lived to see the fulfilment of that thought, and rejoiced in it the more because it was so legitimately the result of Dr. Bell's successful studies in one of the most humane branches of education. He saw the manner in which sound causes vibrations of the atmosphere to act upon the tympanum, or drum of the ear, and that these vibrations are carried to the brain by the nerves; in other words, that the Overruling Power had placed a telephone in every human head. A diaphragm was then formed corresponding to the tympanum. This as a membrane receives the vibrations; and the metallic conductor, of any indefinable length (an inch or a thousand miles), forms the nerve along which the electric waves of sound move.

Thus did the originator study the workings of the Supreme Intelligence. In the same manner, Smeaton, when about to build the Eddystone Lighthouse, went to the forest to study how the Creator imparted to trees strength to resist the storms, and took for his model the oak, spreading with a curve from the roots and curving out again towards the branches. So Harvey, when he discovered the circulation of the blood, was led to the result to which he came, by observing the system of valves placed at various sections along the veins, allowing the blood to flow but one way. "I notice," he said, "that everything the Great Being has made has a purpose; for what purpose, then, is this?" The answer was found in his great discovery, revealed through this evidence of prospective design. Thus also Dollond, when he made his most important improvements in the telescope, studied the laws of the refrangibility of light, in connection with the structure of the human eye. He who said, "Let light be, and light was," had made exactly the provision requisite; and

precisely the same arrangement was found to be needed in the telescope. Thus nearly every discovery in science, in mechanics, and in art has been anticipated in nature; while that which is most in harmony with the underlying and invisible laws of the universe will inevitably endure the longest and be productive of the most good. In the same manner Nature foreshadowed the telephone, and the telephone is one of the wonderful exponents of her laws.

In nearly all cases where any important discovery has been made, it has been found that various intelligent and active minds have been earnestly at work upon the same problem. The question of priority has been before the courts; and so far the courts have decided that the priority belongs to Bell. Both Judge Lowell and Judge Gray gave to the subject minute investigation. Judge Gray's decision was emphatic. "Dr. Bell," he declares, "was the first inventor who successfully used the electric current for the transmission of articulate sound." To him belongs the credit of discovering "that undulatory vibrations of electricity can intelligently and accurately transmit articulate sound, and by him was invented the process by which he reduced his discovery to practical use." What are the results? Three hundred thousand telephones are at this time in daily use within the limits of the United States. They are in constant service through nearly all the countries of Europe. They are to be found in England, France, and Spain, Belgium and Germany. They are familiarly known in the great cities, — St. Petersburg, Moscow, Warsaw, Odessa, Rome, and Naples. They are alike in the workshop and the palace, in the drawing-room and the counting-room. The manufacturer communicates with his workmen, while the Czar sits in his palace and listens to the music of the opera. In Cincinnati one hundred and thirty villages within a radius of one hundred miles have been brought, by the telephone, within speaking distance. Both Boston and Lowell form centres connected by telephone with yet wider circuits. The capacity of the telephone for use over long distances is at present not fully known. Conversation can usually be carried on with ease for one hun-

dred miles, and, under general circumstances, one hundred and fifty miles is not too far for ordinary use. Conversation has been carried on over a distance of four hundred miles; and in another instance a dialogue took place with satisfactory distinctness by friends in New York and Cleveland. The experiment has also been tried of speaking from New York to Chicago, and words were readily exchanged between those places; but the general use of the telephone over so great a distance remains for the future to determine. The extent of the work now going on is suggested by the fact that there is at present in use in this country more than twenty-five thousand miles of wire; and a company that struggled hard for existence in the earlier period of its life, have cleared themselves from all serious complications, and report their earnings for the last year as $1,576,031.57. In regard to Canada they have control of the whole dominion, and are rapidly increasing their operations. The same work is now becoming speedily extended through South America, at Buenos Ayres, at Rio Janeiro, at Venezuela, Rosario, Santa Fé, and Cordova. Not many years ago, much was said of what was called the Whispering Gallery, in old St. Paul's Church of London; but now it seems hardly too much to say, the people of the whole globe may speak the one to the other.

DISCOVERIES AND INVENTIONS.

WHEN the American Academy of Arts and Sciences was originally organized, in 1779, in the midst of the exhausting contest of our struggle for independence, the founders of that eminent society made the following statement: "Many important European discoveries have been in a great measure useless to this part of the world, in consequence of a situation so remote from the ancient seats of learning and improvement." What would those able men have thought, the leading men of their time, if they could have witnessed, with prophetic foresight, the changes which in one century have been brought about? The "situation so remote" seems now less distant. Here also, from the seeds they scattered, we have our own "ancient seats of learning and improvement," which, in some respects at least, may be said to rival those of the Old World. At all events, we are not so far separated as to prevent our working in harmony. No one could realize more fully the privileges they enjoyed, even at that trying period, than did those noble men. "The citizens," they say, "have great opportunities and advantages for making useful experiments and improvements, whereby the interests and happiness of the rising empire may be essentially advanced. . . . Enjoying that freedom which is propitious to the diffusion of knowledge, which expands the mind and engages it to noble and generous pursuits, they have a stimulus to enterprise which the inhabitants of few other countries can feel."

How truly have these sagacious and inspiring words been verified! For the past hundred years the enjoyment of freedom, the diffusion of knowledge, the expansion of mind, the

engagement in generous pursuits, have given a stimulus to enterprise, and led to unnumbered discoveries and inventions in every branch of science and of thought.

If you turn to the astronomer, he looks to the heavens through instruments such as Galileo never knew. What to him was an apparently meaningless blur, becomes now a clearly defined system of worlds; size, color, motion, are perfectly distinct. The observer is lifted to a higher plane, and the curtains of space are drawn aside. If you turn to the microscopist, the invisible realms to him take almost colossal proportions. The minute becomes gigantic; a wing, an eye, a hair, suggests ample study for a lifetime. That which once no mortal could even behold, displays now the most perfect organism, supremely exquisite in all its parts, as wonderful in itself as the myriads of worlds that are revolving through space. Then, what separate fields are presented for investigation, — the animal kingdom, the vegetable kingdom, physiological and structural botany, comparative anatomy, the mysterious phenomena of growth! Objects too small for the unaided sight are obliged to give evidence of what they are, and often fill the mind not only with astonishment but with an ecstasy of joy. If you visit the laboratory, you find the man of science aided in all his studies by the delicate instruments which have been devised to help his investigations. He is making the most astonishing discoveries through agencies invented for him. If you enter a factory, amid the whirl of machinery, you cannot count the new and ingenious methods of facilitating human labor. Iron and steel, wood and water, seem mellowed with thought. Intelligently they move and toil for human advantage. If you go into the field and watch the husbandman, you find him ploughing, planting, reaping, raking, binding, threshing, shelling, all by machinery. The most curious and intricate mechanism, that looks impracticable for common uses, works like a human creature for the benefit of man. The farmer sits and looks at the upturned furrow and the gathered harvest with wonder. If you enter the studio of the photographer, you may see, by the most ethereal process, rays of light portraying the

features of your friend. The sun, ninety million miles distant, can give you, with one touch, the countenance of every benefactor you have; nay, the localities you have taken delight in, the mountain or valley, lake or stream; the scenes you have visited abroad or would like to visit; the pyramids and obelisks and antiquities of Egypt; the places most sacredly associated with the Saviour through the Holy Land; Spain with the lace-like traceries of its Alhambra, Venice with its gondolas floating over the Grand Canal. Or, if you prefer the galleries of art, you have the counterparts of the great masters, Raphael, Michael Angelo, Correggio, and Leonardo da Vinci, not indeed in their original greatness, but full of suggestion, and all drawn with a pencil of light; or if, instead of the studio, you enter the hospital, you find, through yet another extraordinary discovery of science, that those who were but a moment before writhing in agony, by the gentlest process, are relieved of all pain. The surgeon leans over and carefully draws his knife, while the patient quietly reposes as if in sleep. Dr. Jackson, who suggested the use of ether to produce insensibility to pain, lived within a few minutes' walk of Mr. Emerson's residence, and the first trials, made by others, were in his immediate neighborhood. He knew familiarly the hospital into which it was earliest introduced; and the discovery and application of anæsthesia, which he lived to see extended over the world, he counted as one of the greatest benefactions yet bestowed upon mankind.

Added to the great Scientific Discoveries which largely helped to increase the growth of the country during the period of Mr. Emerson's life, must be considered the Inventions which occupy an important position in this industrial era. These were at times the result of patient study and elaborate experiment, and at times they may have flashed upon the thought as an intuitive creation. Whatever were the facts in regard to this, we think it is safe to say, that the inventive genius of man has never been so active, or accomplished so much within the same space of time to advance the progress of civilization.

What, then, was the condition of the country in this partic-

ular when Mr. Emerson entered upon his career, and what changes did he live to witness? The applications made at the Patent Office, in Washington, are a safe criterion of what is transpiring. In 1790, including the whole of the United States, there were only three applications for patents; and through seven succeeding years the whole number of applications only reached 145, — on an average but a little over twenty for each year. During the year in which Mr. Emerson entered college (1813) the whole number of patents applied for at the Patent Office from the entire country was 181; for the four succeeding years, the applications for patents at Washington were as follows: —

1814	210	1816	206
1815	173	1817	174

making, for these four years, 763 applications for patents. In the year 1797, the year in which Mr. Emerson was born, the number of applications for patents was 51; in the year he died, 16,584, — an actual increase of 16,533. Nothing can show more conclusively the activity of the inventive faculty, and the extraordinary progress made in that department within the experience of one individual.

THE CIVIL WAR.

It has been stated in the foregoing Memoir, that Mr. Emerson during the Civil War was greatly interested in the education of the multitudes of freedmen who were liberated during the war, either as the natural result of the great struggle or by the Act of Emancipation. As chairman of the Educational Committee, he held a most responsible and laborious position. Thus did he show the consistency of his character, and, not satisfied with mere words of approval, he desired to give practical aid to a work which so deeply interested him. To the thousands now set free, education of some kind was more important than ever. New duties and responsibilities were opening before them; how imperative that they should be instructed in the proper way of meeting them! But it seems hardly fitting that this single feature of those exciting times should be alluded to, and no further mention made of one of the most momentous events in modern history.

Many readers, looking upon Mr. Emerson's life superficially, might suppose that it was a life of almost unbroken tranquillity and happiness; yet he not only had his domestic sorrows, but he passed through seasons of unwonted commotion, — seasons that convulsed the nation, and taxed to the utmost every power of endurance. No one who was not living during the period of the Civil War, can easily comprehend the anxiety through which whole communities passed. Hardly was there a family from which some loved member had not gone to the war; hardly was there a hearthstone where there was not some vacant chair; and how many young and fair and noble went forth, from their love of country and their devotion to the right, nevermore to return!

The Civil War burst like a tornado over the land, bringing bloodshed and desolation in its career. It was a war which in certain quarters had been deliberately planned, — the mature fruit of a secret purpose cherished for years. Every preparation which it was thought would secure the proposed ends had been cautiously made; military stores had been transferred, military arrangements for defence and attack had been thoroughly considered. The fires of animosity had been fanned and kindled into an intense heat. Through the loyal States there was no preparation for such a condition of affairs, because no such condition of affairs was even suspected. When the facts became known, astonishment gave way to courageous resolve. As the hideous features of this colossal insurrection were unveiled, it awakened, through all the loyal States, a determination and patriotism which seemed universal and invincible. Every noble element was at once aroused. No sacrifice was too great to be readily made; no hardship could repel, no danger intimidate. Party lines melted into air. The thought of minor differences vanished, while all united, with glowing unity of feeling, in defence of the Government. The lumberman in the forest, the farmer in the field, the mechanic in his workshop, the merchant in his warehouse, the student in the school, the academy, and the college, — all listened to the voice of their country, and were ready for service. It was no hour for trifling. With all it was a solemn question of life or death. This was no holiday excitement; it was a decision that involved the perpetuity of freedom. Through the Eastern and the Middle States and all the Territories of the great Northwest, from Maine and Massachusetts, to California and Oregon, hundreds of thousands sprang to their feet, and were resolved to take no step backward until the work for which they were united was fully accomplished. With different shades of opinion there was perfect unity in regard to the result, and a growing conviction that an overruling Providence was at work for the fulfilment of beneficent ends. More and more deeply was it felt, with every progressive movement, that a higher than mortal power was to accomplish purposes which would

make the age forever memorable. The very effort to perpetuate a wrong was to be the direct means of extirpating it. Armed treason rendered the act of emancipation not only legally right, but an absolute necessity. At the beginning of the war, four millions of human beings were held in bondage; now, as we gaze back, from the vantage ground of the present time, and search carefully over this wide Republic, we see that from ocean to ocean not one slave exists. Thus, as the dark clouds of war have parted and rolled away, we can behold how Providence has created a new era in the world's history.

To thoughtful minds, through long years, one terrible problem had been presenting itself. Freedom and slavery, linked together, formed a constant incongruity. Through wide territories slave markets abounded, where human beings, male and female, old and young, were made matters of traffic. Often were these poor creatures driven manacled, under the lash of the overseer, from one market to another. The whole system was appalling. Monstrous in its nature and fearful in its results, its antagonism to freedom, as well as its essential barbarity, was deeply and widely felt. With the progress of civilization, and, above all, with the advancement of Christianity, more just and generous views could not but take possession of the human mind.

No one could feel more profoundly than Mr. Emerson whatever was associated with the national honor and life, or cherish a firmer faith in that Providence which watches over all, bringing good, in ways least expected, out of apparent evil.

Mr. Emerson was sixty-four years of age when Abraham Lincoln was chosen President of the United States. The election was peaceable and constitutional; as much so as the election of any President, from the time of Washington onwards. Each step had been in harmony with the letter and spirit of the Constitution; yet, notwithstanding all that was both generous and conciliatory, this event was made the occasion of an insurrection so bitter and violent as to be without a parallel. A confederation of slave-holders leagued

themselves against the Government of the nation, only too ready to insult the national flag and to trample the Constitution under its feet.

At half-past four o'clock on Friday morning, April 12, 1861, the American flag was first fired upon, while the bombardment of Fort Sumter lasted between thirty and forty hours. Red-hot shell and shot were thrown upon the fortress erected by the United States Government for the defence of Charleston. The fortress was under command of Major Anderson, aided by a handful of men who were supposed to be sufficient for what had been considered a time of peace. The fierce cannonading thus suddenly opened, was steadily continued until the fort took fire, and the little company of faithful men were hemmed in by burning rafters. Presently each building was in flames, and even the granite walls of the powder magazine were shattered, and the iron doors broken through, while it was expected that at any instant might come the fatal explosion. Still, even then the American flag held its place, while Anderson and his men were true to their country. At length, however, the force brought against them was too great, and they were obliged to surrender. Yet the only condition upon which they would yield was that they should march out under the national flag, with their colors flying and drums beating. When they had thus left, the next act of rebellion was to raise the Confederate flag in the place of the stars and stripes, and that flag of the Confederates, it was declared, should soon wave over the Capitol at Washington.

Such was the earliest open act of war. This outrage, like an electric flash, kindled the nation. The effect through the whole North and West was amazing. There was but one sentiment and one will.

An extra session of Congress was at once called, and an order issued by the President for 75,000 troops. Within two weeks, in answer to that call, 300,000 men had voluntarily offered their services. There is no occasion to repeat here facts well known; it is enough simply to state that Mr. Emerson watched with earnest feeling the vicissitudes of

that trying time. A tempest dark and dreadful was sweeping over the land; and what was to happen next was, beyond human power to foretell. But with Mr. Emerson faith was ever dominant. He witnessed with joy the enthusiastic loyalty which universally prevailed. Everywhere the highest intelligence and truest strength of the country was represented. No class of men held back; while thousands upon thousands offered their services, and were ready, if need be, to give their lives for their country.

Through four successive years Mr. Emerson watched with anxious solicitude the result of the conflict. With each defeat he felt a pang, and with each success, gratitude and exultation. The battle of Malvern Hill and in the Wilderness of Virginia, the capture of Savannah and New Orleans, the struggle above the clouds on Lookout Mountain, and the march from Atlanta, — all these seemed to pass before his eye. The conflicts at Fort Donelson, Chattanooga, Antietam and Gettysburg, Winchester and Nashville, Vicksburg and Mobile, brought a throb to his heart. He lived to read the account of six hundred battles, in which multitudes laid down their lives. He saw Massachusetts alone contribute one hundred and sixty thousand men to the army and navy, and expend twenty-eight million dollars from her treasury. At one time more than a million men were in the service; the Army of the Potomac alone numbered two hundred thousand. The State of Ohio, within four weeks, organized and placed in the field forty-two regiments of infantry, — nearly thirty-six thousand men. Eighty-four thousand well-mounted cavalry were in the service.

All this was requisite to keep at bay the armed forces arrayed against the Government; to check that slave-power which was determined to fortify and extend its system, — that persistent treason which would allow nothing to escape its grasp by which it might strike a death-blow at the Republic, and shatter the Union into fragments.

If Mr. Emerson had turned to the "London Times," in 1861, he might have read such startling lines as these: "The crash of the New World!" "The bubble has broken!"

"All the institutions and destinies of that mighty Union are scattered!" "In fact, the United States of North America have ceased to be!" That such was the hope, of at least a few, on the other side of the ocean, there can be no doubt; but such was not the aspect of things on this side of the Atlantic. Not for a moment was the general faith shaken; and we think we can truly add, that not even for one instant did the determination of the people waver in regard to carrying the work they had commenced triumphantly through. There was probably not a city, or town, or village in New England that was not represented on the battle-field; father and son at times standing shoulder to shoulder, while mothers and sisters and daughters were watching in hospitals or laboring with the Sanitary Commission. So, too, New York and Pennsylvania, Ohio and Michigan, Iowa and Nebraska, Minnesota, Montana, and Wisconsin, were all pledged irrevocably to free labor, while their strong and stalwart men stood firm and immovable by the integrity of the Union. And so, also, California, at the extremest line of the Union, with nothing but the Pacific Ocean between it and China, not only sent men in full numbers, again and again, to aid the great cause, but she poured forth her silver and gold without stint for that good Samaritan-work of the war, the Sanitary Commission.

The foundations of this Government were not laid upon "unrequited toil." In the Declaration of the founders it was proclaimed that all men had an inalienable right to life, liberty, and the pursuit of happiness; which was a simple recognition of that brotherhood of man revealed by Christ, the divine germ of true liberty, the fundamental idea of the Republic. In this struggle slavery and freedom were brought face to face. The advocates of slavery forced it to be so. With a wild infatuation they compelled a decision. With their own hands they fired the train that was to explode the evil they cherished. By a righteous retribution the very system of slavery which had created the war must, by the inherent laws connected with that war, become exterminated.

In September of 1862 the preliminary proclamation by the President was made public, and in January of 1863 the great Proclamation of Freedom was issued by the head of the nation, as commander-in-chief of the army and navy. Thus the millions of human beings who had been held in bondage were declared to be freemen forevermore. Slavery had already been abolished in the District of Columbia by an Act of Congress; it had been prohibited by law throughout the Territories; and now it was swept from all the States in active rebellion. According to the usages of military service this declaration was irrevocable. The measure in itself was an act of self-preservation; but it was none the less a deed of justice and humanity. Thus was accomplished one of the most essential steps towards the utter extinction of slavery, and the establishment of consistent and universal freedom. A result of such immeasurable consequence could not but be recognized among all nations as an event of momentous import. It formed, beyond all question, an epoch in the history of the country and a new era in the progress of mankind.

The Proclamation of the President was received through all the loyal States with expressions of joy. The re-election of President Lincoln was a testimony of popular approval. The votes of both houses of Congress prohibiting slavery throughout the Republic made doubly the Act of Emancipation a vital reality; and to establish yet more fully this great measure, it was resolved by both houses of Congress to submit to the legislatures of the several States the Constitutional Amendment; and on the 18th day of December, 1865, the Hon. William H. Seward, as Secretary of State, officially proclaimed the ratification of the amendment, and certified that it had become a part of the Constitution of the United States. Thus, by the act of the President, the approval of the two houses of Congress, and finally by the emphatic affirmation of the whole people, was slavery forever overthrown throughout the entire land. "Never until now," wrote Mr. William C. Bryant, "could we say that slavery has been abolished by the solemn verdict and sentence of the nation. The formal

assent of twenty-seven States to the repeal of the law of bondage has snapped the last link of the fetters which galled the limbs of four millions of God's children and our brethren." "It puts the seal," he emphatically adds, — "a seal never to be broken, — upon the mouth of the bottomless pit into which that foul abomination has been thrown."

Thus did Mr. Emerson live to see the Government he honored, in the hour of its bitterest trial, most nobly defended; the rebellion, with its threats of destruction, utterly overthrown; and slavery, which was always a source of contention, and which was to have been the chief corner-stone of the new confederacy, wholly and forever abolished. Not many periods in all the past history of the race have been so memorable. And among the many who rejoiced in the result, no one could do so more heartily than George B. Emerson. This was to him, as it was to Abraham Lincoln, "under God, a new birth of Freedom;" and he could joyfully respond to the emphatic language of the President, as if it contained the answer to his most fervent prayers: "The government *of* the people, *by* the people, and *for* the people, *shall not perish from the earth.*"

"Let us never doubt," said Abraham Lincoln, "that a just God, in his own good time, will give us the rightful result." As he journeyed towards the scene of his inauguration he said, "Without a name, without a reason why I should have a name, there has fallen upon me a task such as did not rest even upon the Father of his Country. On the Almighty Being I place my reliance. Pray that I may receive that Divine assistance, without which I cannot succeed, but with which success is certain." To the disaffected he said, "You can have no conflict without being yourselves the aggressors." The principle he started with, and the principle he clung to, was this: "A house divided against itself cannot stand. The Government cannot permanently endure, half slave and half free. The Union will not be dissolved, but the house will cease to be divided." This he lived to see verified. Sagacious, honest, and true, he fulfilled his work; and at length, "with malice towards none and with charity for all," he

saw a united country and a free people. For him every loyal heart cherished admiration and gratitude; once again tranquillity prevailed, while victorious armies were quietly returning to their peaceful homes.

But just then one more dark deed was to exemplify the spirit of the rebellion. At a moment when he least thought of it, unguarded and unsuspecting, the good President fell, mortally wounded, under the hand of an assassin.

It was in harmony with many appalling deeds that had gone before. The sick-room of William H. Seward, Secretary of State, at the same time was entered by an accomplice of the assassin, and the Secretary was stabbed three times with a bowie-knife, while General Grant and others were marked as intended victims, but almost miraculously escaped. Such was the closing crime of the rebellion. The telegraph carried swift word over the country of this terrible deed, while amid tolling bells and the sound of minute-guns a people bowed in anguish. The seal of martyrdom had been put upon the President's career.

Thus much is stated respecting the Civil War and the great Act of Emancipation, because they were subjects of deep interest, affecting Mr. Emerson's life, and because his position as chairman of the Educational Committee led him, in connection with the war, to important labors for the instruction of freedmen, who were liberated by thousands during the war, — forlorn creatures, utterly ignorant, but eager to learn. This truly philanthropic mission sought the industrial, social, intellectual, and religious improvement of that large class of persons who, as the armies advanced, had been released from slavery. Grateful beyond measure, they let no opportunity of gaining information pass unimproved. Thousands upon thousands flocked to the Union army, rendering valuable assistance; and so important was their aid, that they were cordially welcomed through all departments of the public service. Multitudes of blacks were wandering over plantations deserted by their former masters, without control or guidance; but, docile as little children, they gathered confidingly about the teachers, asking if they could be taught

how to write and to read. The old and the infirm, as well as the vigorous and strong, were earnest to learn. Mr. Emerson, by his aid in selecting and sending teachers to this new and untried field of labor, showed his Christian benevolence, his intelligent zeal, and the unwavering consistency of his character.

THE STATE OF ILLINOIS DURING THE WAR.

In the year 1866 (the year following the close of the Civil War), Mr. Waterston was chosen chairman of the Committee to write the School Report for the City of Boston. During that year he visited the South and the West, and included in his Report the result of his observations in those sections of the country. He takes the liberty of introducing here a passage respecting the State of Illinois, as an illustration of what was going on during that great national struggle. This is simply what one State was doing in company with many others; showing how earnestly they were ready to stand by their country. In doing this they by no means neglected the best interests of their State, and among those interests none was more prominent than the cause of education. Nothing can exemplify more fully the spirit of the people, or reflect greater honor upon their character.

ILLINOIS.

The State of Illinois contributed more than a quarter of a million of men for the national defence. Teachers and pupils went side by side into the battle-field. Literally, thousands of teachers left the school-room for the camp. From the Illinois College, in 1864, the whole senior class, after having been examined for their degree, marched in a body to the war, the professor at their head. The famous Thirty-third Infantry was largely composed of students. From various colleges, 4,498 alumni and students went to the war. One college sent seven hundred, — of whom one hundred fell in the service. Such is the record of a State which sent two hundred and fifty-six thousand men to the war, while at that

very time she was erecting more school-houses than ever before, and at a larger aggregate cost; and, in addition to all she was so nobly doing for the Government in money and men, she was also contributing an unprecedented amount for education throughout the State. Within two years 1,122 school buildings were erected, of a superior order, at an aggregate cost of $1,305,961, and this by voluntary local taxation, — a fact, under the circumstances, probably without a parallel. In 1865 Illinois contributed $475,072 for new school-houses; and in 1866, the princely sum of $830,889, — an increase over the previous year of $355,817, and over that of 1864 by $610,853.

The number of scholars enrolled through the State, for the year ending Sept. 30, 1866, was 614,659, — an increase of more than forty thousand within two years. Between 1860 and 1866, while so large a number of male teachers were absent at the war, the number of female teachers increased by 3,965, who came in to make good the place of those who had gone. The money assessed in the State for the support of common schools, within eleven years, has been $7,492,974.51, — nearly seven and a half million dollars; but, added to this, there has been a voluntary local taxation, amounting in ten years to over thirteen millions ($13,000,166); so that, munificent as has been the aid of the State, still more munificent has been the voluntary contribution of the people, — the people having generously given two dollars for every one appropriated by the State, — so that actually within ten years the combined sums have reached the incredible amount of nearly twenty million dollars ($19,886,331). Romance is less wonderful than reality, when reality can present facts like these. What page that history has ever written surpasses in true interest such a recital?

SCHOOLS FOR THE FREEDMEN.

HAVING presented some statements respecting education in Ohio, Kentucky, Missouri, Wisconsin, Michigan, Minnesota, and other States at the West, an account was given, in the same Report, of efforts exerted in behalf of the freedmen, respecting which allusion has been made in dwelling upon Mr. Emerson's duties as chairman of the Committee on Teachers.

The writer of this was for some time one of the committee, and can bear testimony to the devotion of the teachers and to the exceeding interest and value of the schools. He will only here speak of his visit to the schools in Washington and Richmond, which may have the greater interest because it refers to the year the war closed, and states what was going on at that moment.

In Washington, the capital of the country, where the subject of education is attracting new attention, the schools for the freedmen, under the direction of teachers from the Northern States, formed the special object of observation. Nothing can surpass the devotedness of the teachers, or the hearty zeal of the pupils. A more inspiring sight the human eye cannot rest upon, alike honorable to teacher and taught.

In Richmond, while the old slave-markets are deserted, the schools for the freedmen are thronged. The halls of the Capitol, where the officials of the attempted confederacy met, are now empty; while the poor and the ignorant, with a freedom they never enjoyed before, gladly assemble in every place which can be obtained, eager to gain knowledge. Under the broad folds of the national banner, teachers are earnestly imparting instruction. There it was we heard the children

of those who, until the Federal armies entered Richmond, never knew from personal experience what liberty is, sing with an outburst of honest enthusiasm, "The Battle Hymn of the Republic." Intelligent teachers from the North, both from the East and the West, are actively engaged in this work, laying the strong foundations of future peace and prosperity.

The intelligence of the Northern armies not only gave them skill, but clothed them with added power. Wherever they went, enterprise, knowledge, and all the accompaniments of a higher civilization went with them. Along the whole line of the camp-fires school-houses sprang up. An army of teachers followed close upon the army with bayonets; and before the clouds of strife had rolled away, seeds of blessing were scattered in the very furrows of battle.

That good work is still going on. More than a thousand teachers, in the spirit of a disinterested patriotism, are at this moment instructing through the South over one hundred thousand persons, young and old; diffusing the light of knowledge where it meets with a joyful welcome. Thus are these great civilizing instrumentalities insuring the moral and intellectual elevation of the people.

NOTE. — Many of the teachers who went at that time to the South were possessed of uncommon ability, and from their deep sympathy in the work, gave up important positions at home, that they might aid in this labor. From the letters of that period, the following, by William Lloyd Garrison, is selected, because it refers to Mr. Emerson, and also to one who, interested in the freedmen, was desirous of doing whatever might be in his power for the welfare of his people.

SEPTEMBER 7, 1863.

REV. MR. WATERSTON.

MY DEAR SIR, — Allow me to introduce to you the bearer of this, Mr. A. M. Lafferty, who, though of African descent, gives little indication of his nativity. By the testimonials he will lay before you, you will see that he has graduated with high honors at the University in Toronto, as a

mathematical and classical scholar. His case is one possessing peculiar interest; and at the request of Mr. George B. Emerson, he calls upon you prior to the meeting of the Educational Commission, on Wednesday next, and with reference to the elevation of the freed people of the South.

Yours, for light and liberty,

WILLIAM LLOYD GARRISON.

This gives us a glimpse of Mr. Emerson, in one of his many labors connected with the Educational Commission, and suggests, in some degree, the spirit of the times.

GEORGE B. EMERSON AND KING'S CHAPEL.

MR. EMERSON, through all the years of his Boston life, was not only a constant attendant at the services of this ancient and historical church, reaching back into the colonial days, but as an honored and beloved member, became the recipient of many tokens of confidence and respect. The following statement is by the Rev. Henry W. Foote, the pastor of the church. In an accompanying note he says: —

MY DEAR MR. WATERSTON, — I am much gratified by your request, and shall be glad of the opportunity to send you something about our dear old friend Mr. Emerson, especially in his parish relations at King's Chapel.

With sincerest regard,

Faithfully yours,

HENRY W. FOOTE.

"Mr. George B. Emerson was, through all the active days of his city life, a constant attendant at King's Chapel. He was the chosen friend of the Rev. Dr. Greenwood, whose tastes in natural history he shared. To him he looked as the religious teacher who most satisfied his spiritual nature. It is a special pleasure to speak of one who so earnestly loved this church, and who became identified with its best thoughts and interests. He was a member of the vestry from 1841 to 1866, being also junior warden in 1843–44, and senior warden from 1845 to 1853, and again from 1863 to 1866.

"The impressive duty was delegated to him of inducting the Rev. Dr. Ephraim Peabody into his official relations as minister of the gospel in this place. He was intrusted with the same duty when the present pastor was publicly inducted into his office. It is the custom of this ancient church, at the

installation of its ministers, that the sermon in which the new clergyman addresses the people shall be preceded by an address from the senior warden; to this the pastor makes a brief reply. The minister is then presented with a Bible, as containing the holy oracles of Almighty God, a due observance being solemnly enjoined of all the precepts therein contained, particularly those connected with the duty and office of a minister of Jesus Christ.

"No more striking proof can be given of the respect in which Mr. Emerson was held by the church and congregation than the fact that he was thus requested, on occasions of such importance, to act as their representative.

"All the daily duties of his life exemplified his professions here. His work as a teacher was a perpetual self-consecration to the highest purposes of existence. To the cause of education he brought fine gifts of talent and culture. This work he ennobled as a calling for all who should come after him. For thirty years, with wonderful success, he devoted himself to that genuine education which consists in the development of the intellectual, moral, and religious powers; and he thus trained more than one generation of the best women in the community to an intelligent interest in all that is good, whether in literature or in life. His shaping impress is seen in the characters of many, now in middle life or beyond it, who are acknowledged as among the noblest and most useful members of society throughout the country.

"The personal quality of the man was felt in all that he did. Animated by enthusiasm and free from selfishness, he was ever ready to contribute valuable aid, whether in the field of public duty or literary service, and was quick to answer each appeal that was so fortunate as to gain his approval in the multifarious calls of philanthropy. Thus every good person and every worthy cause found in him a friend. Sparing upon himself, he was lavish of his means and his time to all that touched his sympathy. With such a spirit it was natural that he should hold the relationship of counsellor and friend to very many who felt that they owed to him the opening of a better life.

"Certainly no one connected with the society, where, through so many years, I have enjoyed the privilege of his counsel and friendship, has been more desirous to see the church warm with charity and alive with good works; full of faith and of prayer.

"Through his whole life he was loyal to the Master of Christendom in the spirit of a little child.

"To King's Chapel, as his place of worship, he became strongly attached in his early manhood, and with continued love and devotion he gladly attended its services until prevented by the infirmities of age. In his greatly advanced years, the shadows of earth fell about him for a little, before he passed into the Eternal Light."

MEN OF THOUGHT,

WHO PREPARED THE WAY FOR WHAT WAS TO FOLLOW.

PREVIOUS to the commencement of this century there appeared to prevail a general apathy in regard to the physical sciences. The minds of men, if they were active, were preoccupied by other themes. Shadows, as in twilight, seemed resting over all. Suddenly thought was aroused. A rapid development took place on every side; it was like the opening of spring after winter. Copernicus, Kepler, Galileo, and Newton, in their time, had done a marvellous work, a work destined to affect all coming generations. What they achieved had been in a measure recognized, and was becoming more and more fully understood; so that their names are shining to-day over the civilized world with the brightness of the sun. Nothing they discovered will ever sink into oblivion. Not one truth will be forgotten. The full result only waits for the right moment. When minds gifted with sufficient comprehension shall arrive, then whatever has been once seen, will again stand unveiled. But if there is no appreciating mind, the truth may tarry for a thousand years, and will be found as fresh at the end of that time as it was at the beginning. It is the seeing eye and the rightly observing mind that is needed.

In this opening century minds full of vitality were at work. Then it was found that all that had been uttered through the ages was quite at the service of such as could use it. It was as if the very keys of the kingdom of heaven had opened celestial doors, and offered up freely its untold treasures. A new era had evidently dawned. The human

mind was eager to grapple with truth; the great mass of the people were longing for a larger development of intellectual power. So intense was the mental activity that electric influences appeared to fill the very air.

It is interesting to turn to those men of thought who at the time of Mr. Emerson's birth, or immediately before, were preparing the way for what was to follow.

Only nineteen years had passed since Linnæus was still pursuing his botanical researches, with that originality and devotion which have made his name immortal; sending an impetus not only through Sweden, but over countries far remote. Watt and Stevenson were busily engaged in their great mechanical discoveries; Laplace, with unflagging zeal, was investigating various physical phenomena, and solving hitherto baffling problems in mathematical science; Cuvier, at twenty-eight years of age, had been elected a member of the National Institute of France, in recognition of his intellectual achievements; Alexander von Humboldt, born the same year with Cuvier, having finished his studies at the university, had taken his first scientific journey with his friend Foster on the Rhine, and completed his earliest pamphlet. The year that Emerson was born, Humboldt, in the vigor of his twenty-fifth year, was at Jena, in friendly intercourse with Goethe and Schiller. Goethe, on his return to Weimar, writes: "My natural history studies have been roused from their winter sleep by Humboldt's presence." And Schiller dwells upon Humboldt's kindling enthusiasm in the prospect of his proposed travels through Italy, Spain, and America. Sir Humphry Davy was a young man just entering seriously upon the study of chemistry. When Emerson was twenty-three, Davy was elected president of the Royal Society and when he was thirty-two, Davy had finished his brilliant career. In 1812, when Emerson was fifteen, Faraday became, through Sir Humphry Davy's appointment, assistant in the laboratory of the Royal Institution. It was with reference to this that in after years, when Davy was asked what he counted as his chief discovery, he replied that he had always considered his greatest discovery was Michael Faraday!

Arago was Mr. Emerson's senior by eleven years, while Sir John Herschel was his senior but five years; both were in active service through nearly all of Mr. Emerson's life, the latter dying exactly ten years before him. Charles Darwin was born when Emerson was eleven years old. He made his first contribution to natural history in 1826, when Emerson was twenty-nine years of age; he died in 1882, aged seventy-three, one year after Emerson, and his name is now inscribed in Westminster Abbey, near that of Sir Isaac Newton. Thus did Emerson live to see Davy and Darwin, Humboldt and Herschel, Babbage and Buckland, Spencer, Huxley, and Tyndall, and a host of others, all earnestly engaged in speculative thought, and untiring in their scientific investigations. As we reflect, such minds multiply and brighten, like the constellations of Orion and the Pleiades, and the great belt of the Milky Way, stretching across the whole heavens.

EMERSON AND HIS FRIENDS.

LIVING MEN OF THE TIME EFFICIENT IN ACCOMPLISHING RESULTS.

THERE is no necessity of looking exclusively beyond the Atlantic. Here, also, there were gifted natures partaking the same intellectual activity, each fulfilling some essential part in the mental and scientific movement of the time. They all helped to create the stimulus that imparted such unwonted impulse to the public mind. Their penetrating observation and searching inquiry led the way to the results which followed. This is the more impressive when we limit our thought to those who were nearly of the same age with Mr. Emerson, and when we reflect upon them and upon him, both as yet in their childhood, yet soon destined to take prominent positions, and to be united not only in spirit, but to be social co-workers together.

It is marvellous how Providence not only anticipates approaching events, but provides for them. There is a time of preparation, and then appears a scientific truth to meet it. At the needed time come also the proper minds to fulfil the requirements. We look around and find a period of active thought. There is a widespread earnestness for progress. Literature makes its demand; science puts in its claims; wide fields are open for investigation. But who will be found to work in them? When we look again, this thought comes home to us. Here are little creatures rocked as yet in their cradles, — can *they* be the ones who are to meet the needed requirement? It seems at first incredible, and yet it is most true. Those infants, so helpless to-day, are to become speedily

the intellectual leaders of their time. Fitted for their special work, that work will be effectively and worthily done. They will impress themselves upon the age, and leave a name which will be the admiration of coming generations.

Let us glance at some of the young people of that day, when with Emerson they were all children together. Who then could have conjectured what they were presently to become as they ripened into manhood?

First, we may recall one who, when Emerson was born, was not yet one year of age; through life their friendship was to be unbroken. Not only as valued friends were they to be bound together, but as cordial sympathizers and supporters in an especial manner of the great cause of education; and each to leave a reputation unrivalled in his own department of thought. When George B. Emerson was born, Horace Mann was an infant in his first year. In due time that child became an influential member of the State Senate; at Mr. Emerson's solicitation he resigned his position as its President, and accepted the office of Secretary of the Board of Education, which office he held for twelve years, crowding each day with valuable labor and leaving his voluminous Reports as an enduring monument to his fame.

Benjamin Peirce was born twelve years after Emerson. He was appointed tutor in Harvard College in 1831, Professor of Natural Philosophy in 1833, Professor of Mathematics and Astronomy in 1842. For thirty-five years he shed continued lustre over the academic department of the College, in addition to which he rendered invaluable service to the nation through the labors of the Coast Survey, of which survey he was chosen superintendent in 1867, holding that office for seven years; and, associated as he was with the ablest men in the country, all will admit that none were more able than himself.

Louis Agassiz, born in Switzerland in 1807, was ten years younger than Emerson. Thus, while Emerson was working on the farm and in the garden, Agassiz's life had not even commenced. In after years, when Agassiz had acquired a

European reputation, and when he had decided to make the American Republic his adopted home, Mr. Emerson visited the town of Neufchâtel, near which Agassiz was born. "From a hill," he writes, "not two miles from his former home, I had a view of the lake and the plains, and the mountains beyond, which I now recall as one of the wildest, most varied, and most exquisite I have ever seen. Agassiz there grew up to a love of the beautiful." Having studied at Heidelberg and Munich, and pursued various researches abroad, he crossed the Atlantic in 1846; and from that time he devoted himself to the study of natural history as seen on the American continent. One of his first friendships was with George B. Emerson, a friendship which continued fresh and unbroken for twenty-seven years.

Who that could have looked upon these three children in their infancy would have ventured to predict the great work they would each accomplish? With their individual peculiarities they filled their separate spheres, as if Nature knew precisely what was required, and, endowing each mind with the exact gifts which were requisite, had sent them on their appointed mission, — all separate, yet all in harmony.

The year that Mr. Emerson was born there were two students in Harvard University, both of whom were destined to fill most conspicuous positions. William E. Channing and Joseph Story were at that time about seventeen years of age, classmates, and now in their last year at college. As Mr. Emerson's friends, the three were to be united together in many benevolent plans, and by sympathy and hearty cooperation they were to be the promoters of the same great principles. The name of Dr. Channing is now held in honor over the whole world for his consummate genius, his delicate and refined thought, and his unsurpassed eloquence; while Joseph Story, as Associate Judge of the United States Supreme Court, achieved both a European and an American reputation.

Among those who commenced life at about the same time with Mr. Emerson, and who, residing in the same community, became in various ways associated with him, was William H.

Prescott, who was but one year his senior. Few could feel more interest than Mr. Emerson in those researches of Mr. Prescott which were to give him a permanent place among the most distinguished writers of his time. The incomparable History of "Ferdinand and Isabella," of "Philip the Second," with the Histories of "Mexico" and "Peru," have been translated into every language of Europe. Who that in 1796 looked upon the child in its cradle, or that saw him in manhood, nearly bereft of sight, could have imagined a life of literary toil, crowned by such marvellous success?

Another name identified with American history, and pleasantly associated with Mr. Emerson, is that of Jared Sparks, whose extensive editorial labors are universally known. He was eight years of age when Emerson was born. In 1809 he was teacher of a district school; and at that time, his means being very limited, to increase his funds he undertook to shingle a barn for ten dollars. Having studied at Harvard University, he filled there the office of Professor of History for ten years, and in 1849 was chosen President of the College. Such were the friends who, by similarity of taste and by kindred literary pursuits, were brought into close and constant intercourse with each other.

Among the names associated with Mr. Emerson, in that formative period of American literature, is that of Richard H. Dana, who was a lad ten years of age when Emerson was born. Educated at Harvard University he afterwards studied law. In 1814 he was a member of the club by whom the "North American Review" was originated. He was at one time an associate editor of that periodical, contributing to it many valuable papers. His "Buccaneer," "Dying Raven," "Idle Man," and "Lectures on Shakspeare," all stamped themselves upon the public mind, and helped to give a character to the time in which they appeared.

While Emerson was in his infancy, Washington Allston was eighteen years of age and had been in college one year. Allston had passed some time at Newport, where he had become well acquainted with Malbone, celebrated for his exquisite painting in miniature; after which Allston went to Europe,

studying for eight years the works of the great masters, and in cordial friendship with Thorwaldsen and Coleridge, who were both with Allston in Rome, and with whom he enjoyed the most delightful intercourse. So much was Allston respected in his art that he was called by artists in Italy the "American Titian." On his return from Europe, he resided at Cambridge; and Mr. Emerson was one who could not only appreciate his delicate refinement, but sympathize with his poetic genius, and respond with profound feeling to the masterly delineations of his pencil.

There was a boy three years old at the time of Emerson's infancy, residing in the town of Cummington, who answered to the name of William C. Bryant. No one yet had heard of "The Ages," the "Thanatopsis," the "Water Fowl," "The Future Life." Undeveloped capabilities were there. But who could foretell the inspiring influence which would kindle the sacred flame? Who at that time could prophesy that the noblest aspirations of humanity would find through him immortal utterance, — that the rivulet, the sky, the mountain, and the forest would doubly live in his language? The life of Mr. Emerson and Mr. Bryant ran in parallel lines. They occupied about the same space. They held upon many subjects similar views, and were guided by kindred principles. They were alike earnest, persevering, truthful, — widely different, and yet singularly similar, — showing how wonderfully the work of Providence is perfected through various instrumentalities.

George B. Emerson was ten years old when Henry W. Longfellow was born. Both lived in the same neighborhood, on the borders of the Atlantic; one in Wells, a country town, and one in the city of Portland. The lines written by Longfellow on his birthplace, could be repeated by both with equal appropriateness: —

"Often I think of the beautiful town
That is seated by the sea;
Often in thought go up and down
The pleasant streets of that dear old town
And my youth comes back to me."

In their whole life Henry W. Longfellow and George B. Emerson had much in common. They shared alike an intense love for Nature, with clear perception investigating carefully her works, and interpreting, through them, the thoughts of the Divine Mind. They mutually enjoyed the privileges of a college life, and both devoted themselves earnestly to the education of others. If Mr. Emerson could not embody, in language, "The Psalm of Life," he could give it fit illustration in his own daily experience.

Few names in our literature are as widely known as that of Washington Irving, who at the time of Emerson's birth was a boy fourteen years of age, attending in New York the day school of Jonathan Fisk in Beekman Street, a few doors below Nassau Street. Every book that Irving had given to the world, Emerson had welcomed, from the "Sketch Book" and Knickerbocker's "New York" to the "Life of Columbus" and of "Washington." Emerson was twenty-two years of age when the "Sketch Book" made its appearance, which burst at once into universal popularity. Mr. Emerson was thirty-one years of age when the "Life of Christopher Columbus" was published; and not until Mr. Emerson was about sixty did Irving's latest work appear. When Irving was six years of age it was said to be difficult to teach him the alphabet. But when once acquired, has any one yet appeared who has made better use of it?

These are a few, out of many, of Mr. Emerson's contemporaries, who may be said to have created the literary atmosphere in which he lived, and most of whom were his warm personal friends, his intimate associates, and his cordial coworkers.

THE DEPARTED.

Oh, might some heavenly hand
Draw back the shadowy curtains of the sky,
That once that glorious band
Of bright angelic souls could meet the eye!

But they are with us still
In thought and deed; yes, they are with us here,
To sanctify the will,
To soothe each grief, and calm each idle fear.

At the soft sunset hour,
When evening splendors melt along the sky,
We feel their hallowing power
To kindle faith and raise the heart on high.

R. C. W.

THE TRUE INSTRUCTOR.

WHO is the Faithful Teacher? He whose heart
Is ever in his work, who slights no part
Of his great trust, who seeks with power to teach
That which shall gain the highest good for each:
Not quantity, but quality, he asks;
A cheerful offering, and not servile tasks!

Ideas and principles by him are taught, —
Inspiring Truth, and ever-quickening Thought!
Duty with him is no ignoble strife;
His joyous spirit overflows with Life,
While the glad sunshine of his nature streams
Around, till all are kindled by its beams.

And more, far more, with him the loftiest plan
Is that which forms the noblest type of MAN;
That which shall stand the test of future hours
In balanced will, and well-directed powers:
Such is the teacher whom the State should crown;
Worthy of LOVE and HOMAGE and RENOWN!

R. C. W.